THE VETERINARY RECORD

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The Carlisle Case.

We accept Mr. Barrett's contribution to the controversy as an honest and fair attempt to arrive at a solution. We fail, however, to accept his arguments as at all conclusive.

There are two questions in debate. First: Was any cruelty inflicted upon the cow? and second: Were the veterinary surgeons who gave evidence for the R.S.P.C.A. guilty of any want of respect to their profession or of breach of etiquette to Mr. Hewson?

The first question we need not discuss. The trial showed there was a difference of opinion, and every man has a right to his opinion. Our pages are open to anyone who cares to discuss the question of cruelty. Mr. Hewson was acquitted of causing cruelty and therefore the question may be discussed without any reflection on him or even without reference to his action in the matter.

The second question, viz., the duties of professional witnesses in cases where a veterinary surgeon is defendant is surely a very simple one. Our answer would be that an honest witness may safely give evidence in any case, no matter who may be plaintiff or who defendant. It may be accepted that no solicitor would subpœna a witness without asking what the witness's opinion was on the point at issue. Many experts are consulted on cases in which they never appear because their opinion is not found satisfactory.

Mr. Barrett suggests that when the defendant is a veterinary surgeon an expert should defer offering his services until he has heard the other side. This is ridiculous. It would put him in the position of judge of the whole case instead of an expert on some special point. Just imagine what a defendant would say to a man who asked him what his defence was. He would probably reply—"I decline to give you any information." Besides, what would plaintiff's solicitor think of the man who communicated with the other side after hearing the confidential statements of the side proposing to call him.

If we once allow a spirit of trades-unionism to come in where veterinary surgeons are interested, the public will justly value the opinion of veterinary experts in a Court of Law. The only rule of conduct we can approve is that applicable at all times—to form as correct an opinion as possible and to state it honestly, without fear or favour. Of course there is a prejudice in our profession against many of the methods of the R.S.P.C.A., but that cannot seriously be put forward as an argument for refusing to appear in every case which may come into court through them. The Society is not always wrong, and veterinary surgeons are not always impeccable.

We are glad to publish Mr. Barrett's article, but something a little more logical will have to be written before the Carlisle case is put on a proper footing, and before any useful lesson can be learned from it, either as to what has been done or what should be done in future.

MALIGNANT INFLUENZA OF DOGS.

By Harold Sessions, F.R.C.V.S., F.H.A.S., Brighton.

During the whole of this year a virulent outbreak, in the nature of an epidemic, has occurred among the dogs of Brighton and Hove. It is evidently the same disease which has proved so fatal at Bristol and in other towns in the South of England. As far as I can ascertain there is no description of such an outbreak before the cases which were reported from Germany and France last year, though in many respects it simulates the disease of dogs which we find recorded as having devasted France of farm dogs at the end of the last century. When the epidemic appeared first the public in some way got hold of the idea that the dogs were being poisoned in large numbers with phosphorus. In many cases people brought dogs to our surgery saying that they had been poisoned, or else saying that the dog had got something fixed in his throat. Some days we heard as many as half a dozen such descriptions.

The symptoms of the disease vary very considerably, and the after effects are as numerous as those we find in human influenza. The marked gastric symptoms which have been almost alone described by some writers, are absent in many cases, and I consider the term gastro-enteritis as applied to this disease much too narrow. In looking through a record of forty-five consecutive cases treated in three weeks there are quite a third in which no gastritis could be diagnosed. In a very large number of the cases also there is no rise of temperature. One of the most marked features is the extreme lassitude of the dogs, and many of them lie in their baskets for weeks without making the slightest attempt to move or to feed, and it was only possible to keep them alive by continually and regularly passing liquid food into their mouths. Many of the dogs suffered from frequent vomiting and often, although not invariably, this is accompanied by diarrhœa, which in extreme cases goes on to dysentry. Other dogs are first noticed to be ill by their having a number of fits in rapid succession, and in these cases some of them die within 24 hours. The nose is generally very dry. In some cases the eyes are injected, but there is no watery discharge, neither is there any sneezing.

In other cases there are no other symptoms to be observed except the extreme prostration and a very rapid and complete emaciation. Dogs which would eat well and which were fed on unlimited meat with plenty of milk to drink wasted away to mere walking skeletons. In the acute stages of the disease where

the intestinal tract was affected a very fœtid smell came from the mouth, and in some cases there was profuse salivation, the buccal mucous membrane and tongue were ulcerated, and occasionally the anterior half of the tongue mortified and either had to be removed or came away. In other cases there was a most persistent and uncontrolable cough, and though the dogs fed well and even kept in good condition no drug seemed to give permanent relief. Subcutaneous injections of morphia would relieve the cough while the dog was under the effects of the morphia, but beyond this it was little good, and the morphia rather retarded than helped to get rid of the disease, increasing the depression and prostration of the dogs. In several cases the eyes have both become acutely inflamed, total blindness and ulceration of the cornea following. These have been the first symptoms discernable in these cases, and have been followed by the marked prostration that generally terminates fatally.

In nearly all the cases. even when the attack has been light and treated in the early stages, it has been remarked that for weeks afterwards the dogs have lost much of their vivacity and natural energy. Another somewhat frequent symptom in the latter stages of the disease is a marked chorea, and though some of these cases recover there is a tendency for the chorea to remain.

A peculiar feature of the disease is that although so many dogs are affected it seems quite impossible to convey it from one dog to another by contact or feeding. The general symptoms and character of the disease would warrant a belief that it must be contagious, and probably under certain circumstances it is so, but although several attempts were made no direct evidence could be obtained to show that any dog was affected from another.

Post-mortem Appearances.

In making post-mortems on some that died or that it was considered best to destroy, we found that the appearance of the internal organs would vary as the symptoms during life had done, and we were particularly struck with the absence of an appearance described by some writers as being present, namely, an acute inflammation of the small intestines. In hardly any instance were the small intestines inflamed.

In examining the thorax the contents appeared normal except where the cough had been prolonged and persistent, then we found there was a certain amount of interstitial emphysema of the lungs, and the right ventricle of the heart was dilated.

When the mouth was affected there was ulceration of the buccal mucous membrane, the tongue, and the soft palate. The pharynx and œsophagus generally normal, occasionally congested.

Stomach usually very much ridged, and the depressions between the ridges congested and inflamed, no ulceration through the mucous membrane of the stomach observable.

Duodenum slightly congested. Jejunum often very yellow or orange coloured, the colouration extending through all the coats. Ileum orange coloured in patches; towards the end a few circular grey spots with a centre quite black. The spots are about 1-10th of an inch in diameter. The cæcum contains a large number of spots Colon contains a considerable number of spots, and the mucous membrane is congested. Rectum, a very great number of these spots are seen, and the rectum is frequently inflamed.

The liver appears normal, the gall bladder being invariably full.

The pancreas, kidneys, ureters, bladder, and urethra appear normal.

Brain. The membranes in some cases were congested, but as far as we could see the tissues of the brain substance were normal.

Tubes of gelatine and serum were inoculated from tongues of dogs in the first instance, but the growths we obtained were not specific of the disease. At present we are attempting to cultivate growths from the before mentioned spots, but it is too early to say if they will be successful. I hope, if possible, to be able later on to make a fuller statement on the microscopical and bacteriological results we have encountered in this outbreak.

Where we had no clinical symptoms of gastritis but only the lassitude, the fits, or the chorea, the abdominal organs on post-mortem examination showed no congestion or inflammation. Apparently the strongest dogs were the ones that suffered most from gastric and intestinal troubles, the weaker ones having the nervous form and fits.

Treatment.

At the outbreak of the epidemic the treatment we adopted was such as the symptoms warranted, and the usual drugs were administered without very satisfactory results. As the epidemic continued we found much the most satisfactory results were obtained by keeping the dogs in an even temperature, and when they were too weak to feed, as many of them were, we administered either eggs and milk or milk and soda water every two hours. This seemed to suit them much better than any preparation of meat. Enemas of nutrient material we considered were contra-indicated, and their effects were not good. The medicines that gave the greatest relief were combinations of hydrocyanic acid, quinine and chinosol; doses of these administered every four hours, varying in quantities with the size and condition of the dog, had a most beneficial effect, and if the cases could be taken in hand during the early stages most of the dogs would pull through nicely.

MEDIAN NEURECTOMY.

By James Webb, F.R.C.V.S., Bishop's Stortford.

The subject, a very heavy cart mare, aged, had been suffering from lameness for several years owing to a ringbone, chronic sprain of the back tendons, and an enlarged knee.

I performed median neurectomy in August 1898, immediate improvement was the result, and before the wound had healed the mare was workably sound, and has continued so up to the present.

In future I shall resort to this operation for most chronic lameness arising from disease between the fetlock and knee, including the latter.

RUPTURE OF UTERUS IN A MARE.

A fortnight ago, I was called in to see a mare which the owner intimated ought to have foaled the previous week.

He stated that he thought she was in labour, but that something was wrong with the foal. She was perspiring, suffering a certain amount of pain, and had lost her appetite.

On my arrival I found the mare quietly eating her food, the pain having entirely left her; she showed no evidence of labour whatever, but the body was swollen to a tremendous extent, the skin over it being quite tense and glistening, and on pressure she evinced pain. I ordered the abdomen to be suspended in a sling, and left sedative medicine to be given if the pain recurred, with injunctions for the man to come and let me know how she was on the morrow.

According to promise he came over and told me the mare was quite easy, had had no more pain and was eating again. The swelling was the same, but that secretion of milk was, for the first time, evident.

Next morning he called to say the mare was dead, having died at 12 p.m. the previous night. She had commenced straining and was dead in about two hours. I went up to make post-mortem on behalf of the Insurance Co. (she was insured), and noted the following post-mortem, lesions, viz :—

There was a very extensive rupture of the uterus, along its lower border for about two feet, thus allowing the fore part of the foal to descend into the abdomen. By extreme straining the mare had forced the forelegs of the fœtus through herself, these appearing on the outside in the lower part of the perinœal region. She had lost large quantities of blood which flowed through this secondary rupture, and the abdomen also contained a large amount in a clotted condition.

Ultimate death was undoubtedly due to hæmorrhage as very little inflammation was present.

The cause of the rupture, one could only surmise. The mare was old and the fœtus was unusually large.

GEORGE GREEN. M.R.C.V.S.

PURPURA HÆMORRHAGICA.

(WITH UNCOMMON COMPLICATION.)

The patient, a grey cob (mare), 4 years old, was just recovering from an attack of influenza. On the evening of the 16th ult., having refused the food prepared for it, I was again called in to examine. I found the animal was suffering from purpura, swelling as large as a hen's egg on the upper lip, also petechial markings on the schneiderian, conjunctival and vaginal mucous membranes; no visible swelling of the limbs.

Treatment. The treatment adopted was: intra-tracheal injections of iodine solution twice daily, with inhalations of creosote and administration of chlorate of potash internally.

The following afternoon (4 p.m.) the mare commenced to show symptoms of spasmodic colic. Rectal exploration was made, failed to detect any displacement of bowel; no tympanitis, when the animal was down there was no attempt to roll. The abdominal pain was temporarily relieved by hypodermic injection of morphia and the patient remained fairly quiet until eight p.m. when the hypodermic injection was repeated.

At 9.30 p.m. there was marked relief from pain, the cob was standing quietly and looked brighter, although the character of the pulse clearly indicated that such external appearance was the inexplicable (to me) change and (apparent) improvement so often the precursor of the fatal issue.

Shortly after 10 p.m. the mare suddenly staggered and collapsed. I suspected that the enteric complications had been of the nature of a sudden and extensive extravasation into the the bowel or other abdominal organ which had produced the fatal collapse.

Autopsy revealed a very interesting and somewhat uncommon condition. Thorax, slight hæmorrhagic extravasations into parenchyma of lungs; petechial markings on pericardium and endocardium. Stomach contained only a small quantity of ingesta. Intestines examined carefully along entire course, marked hæmorrhagic extravasation at irregular intervals along their whole course; the wall of the bowel at the extravasated portions being ¾in. in thickness. At the terminal portion of the small intestine the bowel was intussuscepted on itself. The intussusception measured two feet, four inches, and at the point of greatest constriction was quite black in colour.

J. T. POTTER-CARTER, M.R.C.V.S.

Liverpool.

FŒTAL DYSTOKIA.

By HENRY GEORGE SIMPSON, M.R.C.V.S., Windsor.

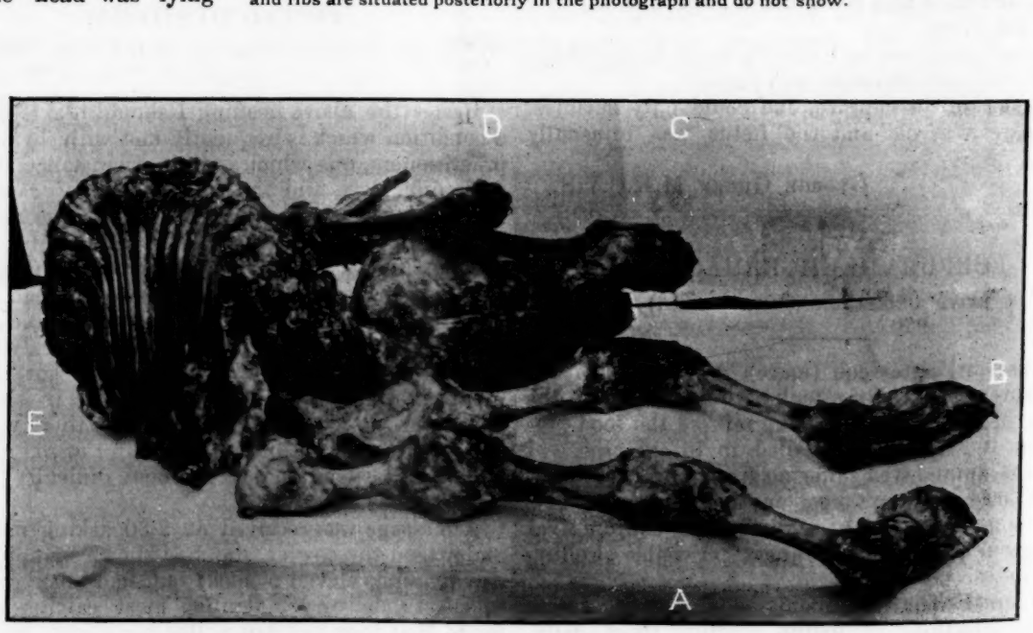
Under the above heading I should like to describe a condition which is frequently met with by country practitioners, one which is in every instance attended with difficulty, and in the majority of cases with fatal results. Fœtal dystokia is not uncommon in many forms, but this form of it is, I think, rather unique, and for this reason I should like to describe it.

The subject was a shorthorn cow who had gone a week over her time with her third calf, and whose owner prognosticated would have a "bad calving" as she had seemed so uneasy and restless for the last month; beyond this there was nothing in the cow's appearance to lead the owner to think there was anything more than a natural fœtus *in utero*, and she had always calved herself without difficulty on the two previous occasions.

A message was received at 2.30 asking me to go and attend the cow as she had shewn symptoms of calving since eleven o'clock, but had not been able to effect a delivery. Unlike most calving cases I found that they had not pulled her about at all, in fact the owner had expressly said that no one was to touch the cow but the veterinary surgeon. On

exploration I found presented two hind feet and a head, and after manipulation I discovered two other limbs which simulated fore limbs. I was puzzled at first with one of these, as, although finding no prominence corresponding to the os calcis the joint appeared to flex in the wrong direction, I could not feel the back, but distinguished the outline of the ribs. The hind legs being the most handy I secured them and attempted to repel the head and fore extremity which I succeeded in doing, but on traction the head and fore limbs appeared in the passage simultaneously. After two or three attempts I came to the conclusion I had something abnormal to deal with. I amputated one fore leg at the knee, and as I could not then effect delivery I removed a limb that kept appearing crossways in the passage. I may here mention that there was a reflection of skin which rendered section very difficult and which I could not account for at the time. I could now feel that the head was lying

The fœtus as removed from the uterus with one hind leg (A) amputated at the hock and one fore leg (B) amputated at the knee. C is the other fore leg with the abnormal knee joint. The Vertebræ and ribs are situated posteriorly in the photograph and do not show.



The dissected skeleton, with the fore leg with the abnormal knee flexed A; one hind leg B; another hind leg amputated at hock C; a fore leg amputated at knee D; and the fused 6th & 7th ribs E.

twisted against the ribs and all attempts to move it were unavailing, I told the owner that I had rather an unusual case to deal with and advised slaughter after trying to calve the cow for four hours.

The post-mortem examination revealed a most interesting case of fœtal monstrosity of which I enclose two photographs, though I am afraid they do not shew sufficiently well this interesting specimen. Unfortunately, a photograph showing the heart and lungs attached to the external surface of the ribs was spoilt in exposure.

The ribs and vertebræ from the withers seemed to be completely everted and reflected on themselves, the whole presenting a conical shaped mass within which was depressed the head and from which at various points arose four limbs, two of them hind limbs and the third and fourth simulating fore limbs, but in the fourth limb the carpus flexing in exactly the opposite way to which it should do in the natural fœtus, and having no flexor tendons. The whole of the organs were well formed and situate without the frame work which represented the body; the heart and lungs were adherent to the conical portion of the everted ribs and vertebræ, and the stomach, intestines, kidneys, and liver were all free, the latter organ being very hard. I found what appeared to simulate two teats between the two hind limbs, the only organs which appeared in anything like their normal position and which gave me to believe that the monster was intended to be a cow calf. I could find no trace of vulva or penis. The skin was closely attached to the head, neck, and limbs, the remainder of it hanging loose and enclosing the organs, the ribs being practically bare. The 6th and 7th ribs were fused into one from the middle to the lower third, the nasal bones were twisted to the right, and the neck from the withers seemed to be twisted to the left; the whole of the bones and organs were well formed and the deformity must have started in early fœtal life. The œsophagus was well developed, entirely free from the pharynx to the stomach, and the anus became attached, and opened on the surface of the reflected portion of skin; the trachea was also unattached until it joined the lungs which were attached to the conical portion of the framework.

The owner attributes the cause of this malformation to the fact that a pack of drag hounds had been in the habit of crossing the fields frequently since October 1st., and this particular cow was always much excited on each occasion and galloped after them some distance; this, I think, is a very feasible solution.

RE THE CARLISLE AND SIMILAR CASES.

I feel desirous, if you will afford me a little space in your next issue, of offering a few remarks which would appear to me to be applicable to the Carlisle case, and indeed to all cases of a like nature in which one practitioner is called upon to give evidence in a criminal court against a brother practitioner. I trust I shall not be regarded by my readers as having taken sides in this latest controversy, because nothing is further from my desire, I merely wish to suggest certain lines of conduct which I feel ought to be adhered to in respect to giving evidence on behalf of R.S.P.C.A. and other prosecuting bodies.

The first question which has to be determined is this:—Should criminal proceedings such as were instituted against Mr. Hewson *ever* be taken against a professional man, and if so under what circumstances? There is no difficulty, I think, in deciding that proceedings of this nature should be taken only in very rare cases, after much deliberation, and in those instances only when manifest cruelty has been inflicted upon a dumb beast. It is a serious matter, not only for the prosecuted member but for the profession generally, when the public, through the medium of the press, learns that Mr. X., a veterinary surgeon, has been fined by a bench of magistrates for acting with cruelty towards a patient whose suffering he has been expressly engaged to relieve; and I can conceive nothing more calculated to lower our status than an announcement of such a nature.

It must be almost fatal to the social position and professional reputation of the incriminated member, and tends seriously to reflect upon the entire profession. If that be so, veterinary surgeons, except in very rare cases, should strenuously endeavour to discourage such prosecutions. We cannot agree with those practitioners who advocate that in no circumstances should evidence for the prosecution be given, because one can conceive cases, happily now most rare, in which a practitioner utterly regardless of his mission, and of the profession which he should strive to adorn, in which proceedings ought to be taken in the interests of humanity, yes, and in the interests of our profession too. Having said this, however, I do not hesitate to express my conviction that, of late, these prosecutions have been far too frequent, and that the officers of the Society in their anxiety to distinguish themselves, and in the absence of sufficient knowledge to understand the points which are placed before them, do not sufficiently discriminate when proceedings should or should not be instituted.

It cannot be too carefully understood and contended for, that the criminal law should not be set in motion against a professional man unless he has been guilty either of gross negligence or gross ignorance whereby suffering has been unnecessarily inflicted.

The veterinary surgeon, like every other individual, is bound by the laws of England and has no right whatever to cause needless pain, he, like other men, is bound by the law, and the practitioner cannot make a greater mistake than by assuming that he is especially protected and shielded. Mr. Hewson no doubt, at first, regarded himself as above the laws in this instance but he, alas, discovered when it was too late that he had fallen into error.

Having regard to all the circumstances of this case, ought Mr. Hewson to have been proceeded against? I cannot refrain from answering in the negative. He is a professional man, appears to have used his skill to the best of his ability, and assuming he was guilty of an error of judgement, which is by no means clear, that is not nearly sufficient on which to found a criminal prosecution. I repeat that only in

cases of gross ignorance or gross negligence should the criminal law be set in motion, and this applies to every case in which the conduct of a professional man is required into.

Secondly, should a veterinary surgeon who is asked to give evidence for the prosecution in such a case consent to do so, and if so under what circumstances and with what object? Of course a veterinary surgeon should in certain circumstances give evidence against a brother practitioner, and especially in those very rare cases of manifest cruelty; but although I go thus far, I assert that before consenting to take this course he should endeavour to ascertain the story of the defence, and having done this should ask himself one or two questions, viz., is this an error of judgment merely, assuming of course that cruelty was inflicted, or is it a case in which a practitioner has acted ignorantly and recklessly, not caring whether or no pain was inflicted? Has he failed to use that care and skill which any reasonable professional man should use? Having submitted these questions for his own determination the line of conduct which should guide him is manifest and needs no further elucidation from me.

It may be remarked, however, that if there is a doubt in the case the practitioner is most clearly entitled to the benefit of that doubt.

In regard to your remarks on the Carlisle case, may I be permitted to say that your reference to "two medical men having in recent times been condemned to death for unfettered action in the treatment of their patients," is perhaps the most inapt analogy you have ever penned and can in no way be applied to the case now under consideration. The medical men to whom you refer were not guilty of a mere error of judgment or of manifest cruelty in the legitimate exercise of their profession, but were convicted of performing an illegal operation which is deemed to constitute a felony, which the law prohibits, and for which it enacts a very severe penalty. Whereas Mr. Hewson was quite properly engaged in a lawful operation, and even though he made the grossest possible mistake commits no felony, but an error of judgment simply. Your comparison, therefore, I suggest is a most unhappy one and cannot be seriously entertained. A veterinary surgeon therefore should only give evidence against a fellow member when, after careful consideration, if possible of both stories, he is deliberately of opinion that pain and suffering have been caused by the wanton carelessness or ignorance of the practitioner.

Thirdly, should the prosecuted member receive pecuniary aid for his defence in these prosecutions. The rules of conduct which I submit should guide a member who is asked to give evidence, should be applied by those who are considering the question of assistance.

The same set of questions should be determined, and primarily it must be strictly borne in mind that a mere error of judgment is not sufficient on which to institute a prosecution. If this broad fact be remembered those who have to decide the question of relief will have no difficulty in saying that in 95 per cent. of the cases submitted to them every assistance should be rendered.

I regret to have occupied so much space, my excuse is that the subject is an important one, and I feel I have dealt with it none too fully. May I in conclusion say I think it is much to be deplored that the comments on this case have been so largely personal. I think the time has passed when such license should be indulged in. I fully believe those who have given evidence in this case have been prompted by the highest motives, and that the question of a paltry fee has in no way influenced them. The mistake which they appear to me to have made is this, that not having judged the matter from all aspects, and having no code of conduct upon which they could rely, and, may be, in their mistaken desire to prevent suffering they were induced to further those proceedings.

W. Freeman Barrett.

Temple, E.C., May 9th.

ABSTRACTS FROM FOREIGN JOURNALS.

The Disease Among the Dogs of Frankfort (continued).—By Dr. Scheibel.

Differential diagnosis.—A great number of illnesses can be mistaken for the above affection. The most frequently diagnosed are:

1.—Meat and sausage poisoning of carnivora. In no case could it be established with certainty that the illness was caused by partaking of foul or putrid flesh or such like substances.

2.—Toxic inflammation of the stomach. The frequent sudden death, the very disturbing course of the illness, the affecting of several individual dogs made one suspicious of toxic poisoning. Numerous experiments which have been undertaken in several chemical laboratories discountenance the idea.

3.—One might easily suspect swallowed foreign bodies. One case came under my notice where this was the case. Anamneses, palpation, and section do not support this idea.

4.—Distemper. Many people associated the affection with distemper, but in every case the remark was made: Oh, it is the new dog disease. If the laity can distinguish the difference between the two affections how much easier should it be for the veterinary surgeon to distinguish. There are no distemper pustules, mostly old dogs, no discharging eyes. Conjunctivitis, no staphyloma formation. No catarrhal pneumonia.

5.—Madness might be suspected when the animals crawl away and come forth from their hiding place with a fixed stare. But there is no history of a rabid dog. Besides the intestinal symptoms are wanting.

Further examinations were not only conducted microscopically, but feeding, inoculation, and culture experiments were indulged in. Four dogs were fed experimentally with culture solutions and pieces of stomach and intestine of hounds dead from the disease, with negative results on post-mortem.

Subcutaneous inoculation also had negative results. Cohabitation has no effect in spreading the disease, one dog dying and many being left out of a number.

Doctor Scheibel is inclined to attribute the illness

to the bacterium coli commune, which, as Jeusen says, is under normal conditions a harmless intestine dweller, but which under certain not very well known conditions is capable of producing a poison penetrating into the tissues of the viscera and causing inflammation.

Rabe has an article in No. 50 B.T.W. on "Bacterium coli commune as a cause of illness in animals." Jeusen has attributed to this bacterium :

1.—Infectious diarrhœa in calves.

2.—Also diarrhœa of other of the domesticated animals.

Jeusen also attributes inflammation of the udder to a mixed infection of coli-bacteria and micrococci.

Could not the complaint under consideration be caused by the mutually stimulating action of coli-bacteria and micrococci.

Doctor Scheibel hopes that the publication of his experiences will throw some light on the subject. —*Berliner Thierarz Wochenschrift.*

Prof. Klett recommends rectal infusion and subcutaneous injection of physiological salt solution. He fancies the disease is an unknown *infectious* illness of dogs.

(From the cases I have seen in individual dogs I see no signs of either infectiousness or contagiousness about the disease. I do not think the affection resembles either influenza or distemper, especially the latter. Post-mortem symptoms seem to point to a disease simulating *swine fever*, except that there is no rapid spread among a number of dogs placed together.—Trans.)

G. M.

ELECTION ADDRESS.

To the Fellows and Members of The Royal College of Veterinary Surgeons.

Gentlemen,

The seat which I have the honour to hold as a member of the Council will become vacant in June next, and having been again nominated to the position, I desire, if my services have merited your approval, again to seek your suffrage.

There are, I think, several questions of interest to us which demand the earnest attention of the Council. The time has arrived when we should endeavour to move the legislature to grant veterinary surgeons exemption from serving on juries, and though the attempt may perhaps prove somewhat costly, the results, if we were successful, would fully compensate us for the expense incurred. I should strenuously advocate any proposal which seemed likely to affect this object.

The question of legislation in regard to tuberculosis has not, I think, received sufficient attention from the Council, it is desirable that the members who represent the profession should more forcibly make their opinions heard and felt in respect to this matter.

In the interests of the profession and the public, the use of tuberculin should be permitted to duly qualified men only, as otherwise unsatisfactory results will ensue, and, moreover, in the hands of dishonest persons tuberculosis may even be spread by its agency.

There is, again, the important question of the prosecution of veterinary surgeons by the Royal Society for the Prevention of Cruelty to Animals. Has not the time arrived when such an indignity as a criminal prosecution should not be perpetrated upon a member of the profession, except in those very extreme cases of cruelty which I believe hardly ever to-day exist? Veterinary surgeons are now highly trained and humane men, and desire only to relieve pain and suffering. I think the members of the profession should actively support any fund which exists or may be instituted, in order that their more unfortunate brethren may have at their disposal adequate funds for their efficient defence.

At present there seems no possibility of our procuring direct representation in Parliament, if this were possible I should by every means in my power seek to attain it, feeling assured that our interests would thereby be safeguarded and extended.

I regard the four-years-course as having proved eminently satisfactory, our students are better trained in every way, and at no period in the history of the profession has such thorough knowledge been imparted to them. The standard of education must be upheld, as by its means the position of the profession will be raised.

There are many other matters which might well be referred to; space, however, forbids my referring to them; it will be sufficient, I trust, if I say that my efforts will in all instances be directed to the advancement of the profession of which I am a member, and although I am not now actively engaged in the work which appertains to it, I shall, I hope, endeavour, by all the resources at my disposal, to uphold the dignity of the calling to which I have devoted the early years of my life.—I am, gentlemen, yours faithfully,

W. F. Barrett.

Temple, E.C.

VETERINARY SOCIETIES.

LANCASHIRE VETERINARY MEDICAL ASSOCIATION.

The usual quarterly meeting was held on Thursday, April 6th, at the Grand Hotel, Manchester, J. McKinna, Esq., presiding, and there were also present Messrs. H. D. Chorlton, E. Faulkner, P. Gillespie, Alfred Holburn, T. Hopkin, Wm. Kendall, S. Locke, and J. B. Wolstenholme, of Manchester; Arthur New, Ashton-under-Lyme; A. Munro, Altrincham; J. Kendall, Barrow-in-Furness; J. H. Carter, Burnley; Ernest S. Gubbin, Glossop; Colonel J. D. Lambert, C.B., London; A. M. Michaelis, Stockport; Hugh H. Ferguson, Warrington; Wm. Woods, Wigan; and H. Locke (Hon. Sec.). The visitors were Messrs. J. J. Garside, and R. J. Collinge.

Letters of apology for non-attendance were announced from Messrs. W. A. Taylor, Alex. Lawson, Walter Packman, Geo. Howe, J. Clarkson, R. O. Stafford, R. Hughes, and J. Abson.

The PRESIDENT, in opening the proceedings, referred to the keen disappointment he experienced at not being able to be present at the annual meeting. His hope that the attack of influenza would have left him in time was unfortunately not realised, but the receipt of Mr. Carter's telegram couched in such kindly terms, and the sympathetic letter from the Society was, to say the least, a good tonic, which was much needed. He should ever feel deeply grateful to the members for their kindness, although he felt he had done nothing to merit it, and while returning thanks to each member he would especially mention Mr. Carter, the officers of the Society (including its active Secretary), and Manchester friends who were instrumental in making the gathering a great success. It was certainly a bad beginning to make on his part after the honour which they had conferred upon him in electing him as President for the second year, but he assurred them that if health permitted he would do all in his power to make the year a success, and in that way to acknowledge the honour placed upon him and one which he should always cherish.

On the motion of Mr. E. Faulkner, seconded by Mr. S. Locke, the minutes of the annual meeting were taken as read.

ELECTIONS AND NOMINATIONS.

The President proposed the election of Mr. S. WHARAM, M.R.C.V.S., Leeds. Mr. Carter seconded, and the motion was carried.

Mr. JOHN ARMSTRONG, F.R.C.V.S., Penrith, was duly elected a member of the Association, upon the proposition of Mr. E. Faulkner, seconded by Mr. S. Locke.

Mr. Wolstenholme nominated for membership Mr. THOMAS HADFIELD, M.R.C.V.S., of Chester.

FINANCE.

Mr. WOLSTENHOLME presented the balance sheet for the past year from which it appeared that the balance in hand at the close of the year was £65 7s., or an increase of about £10 over the balance for 1897. The number of members was 89 as against 81 for 1897. This, he said, was extremely satisfactory from a financial and numerical point of view, but there were a number of subscriptions in arrear to the amount of £30.

Mr. CARTER moved the adoption of the the balance sheet.

Mr. E. FAULKNER seconded, and the motion was unanimously carried.

FORTHCOMING ELECTION OF MEMBERS TO COUNCIL.

This matter came up for consideration when, after some discussion it was proposed by Mr. Woods, and seconded by the President, that Messrs. S. Locke and Alex. Lawson be the nominees of the Society at the forthcoming election.

Mr. FAULKNER having supported, the resolution was carried.

Mr. FAULKNER then moved that the usual Election Committee, consisting of the officers of the Society with power to add to their number, be formed for the purpose of carrying out the details in connection with the election.

Mr. E. S. GUBBIN seconded the proposition, which was carried.

SPECIMENS.

Mr. CARTER exhibited a small Yorkshire terrier, which had been operated upon for cataract on the eye. His description of the case afforded considerable interest.

Mr. WOLSTENHOLME submitted a St. Bernard dog's foreleg on which there had been a tumour. From the extensive erosion of the bone it was evident the tumour was malignant, and he had very little doubt that it was of the sarcoma type.

NOTES ON MICRO-OGANISMS AND THEIR PRODUCTS.

JNO. B. WOLSTENHOLME, F.R.C.V.S., F.R.M.S.

Mr. President and gentlemen,—It has been suggested that a paper on Bacteria might prove of interest; in attempting this I have endeavoured to deal with the subject in a broad manner, hoping thereby to promote discussion.

What are bacteria? They are exceedingly minute living organisms, some of which are endowed with the power of rapid motion. In length they vary much, but the breadth is more evenly maintained; some 25,000 of the round bacteria, or the same number of the elongated placed side by side are required to make up an inch.

Do they belong to the animal or the vegetable kingdom? For many years a fierce controversy was waged on this question, but now they are regarded by nearly all authorities as belonging to the vegetable kingdom. They are spoken of as fission fungi, and are allied to the algæ. These minute organisms, so minute that a hundred may rest on the point of a needle, have been recognised from the earliest period of microscopical investigation.

Leeuwenhock, of Delft, Holland—the father of microscopy—in 1683 described accurately the shape and movements of several varieties he had obtained from the mouth, and decaying teeth. From this date onwards new forms were noted and described, whilst the floodgates of discussion and speculation were opened as to their nature, their bearing on disease, and other problems. It is indeed only within very recent years that any correct appreciation of the varying forms, habits of life, and true place of bacteria in the economy of nature have been obtained. This has been arrived at, first by methods having been devised by which one variety can be isolated from another, then by careful observation of the form of the constituents of the pure growth or culture as it is called, noticing what kind of food suits best, how they act under varying conditions of heat, moisture, etc.: what happens if they are introduced into a living animal, and a variety of other facts are observed.

In 1836 Schulze made a glass apparatus in which he boiled certain animal and vegetable substances. He then allowed access of air, but made it pass through sulphuric acid. He kept the same from May to August without the fluid becoming putrid or the growth of any micro-organism therein. Somewhat later Pasteur boiled milk in a glass flask, and for a cork stuck in the mouth of the vessel some cotton wool which he had roasted; the milk kept sweet for an indefinite period. These and other experiments proved that the putrefactive changes which ordinarily occur when milk, or infusions of vegetable or animal substances, are left exposed to the air, are due to something in the air, which something can be excluded by a net of cotton wool, which at the same time freely admits the air. A little later Pasteur showed that the same result was obtained if simply the neck of the vessel was drawn out into a narrow tube and bent to the form of the letter S. In this manner the theory of spontaneous generation was entirely disproved.

In 1837 the yeast plant was discovered, and Pasteur made his great researches into its life history and resulting products. From that time to the present, discovery has followed on discovery, and from the accumulated facts a science has been evolved.

We have remarked that the vegetable kingdom alone possesses the power of living and building up organisms, from the inorganic or mineral kingdom. This power applies solely (with certain reservations) to those plants which possess green coloring matter. The fungi, such as the mushroom, the sugar fungi or yeasts, and bacteria as a whole, do not possess this colour, and are *not* able to build up their organisms, *i.e.*, to live on mineral

food alone, they must have for their sustenance food which has been formed by some other living organism; thus mushrooms require a large supply of decaying animal or vegetable substances; moulds are seen developing on jam, decaying vegetables, leather, etc., whilst bacteria are found everywhere, in water, in air, in the soil, in our mouths, stomachs and bodies generally, everywhere in fact where pre-existing animal or vegetable tissue can be found.

There is a very close relationship between the yeasts—sugar fungi—and bacteria. This fact may be taken advantage of by noting how the former grow and multiply, together with the various chemical changes which are brought about during the process, which is called fermentation. Yeast, or barm, is that brownish frothy liquid which forms on the top of vats during the process of brewing in this country, or at the bottom of vessels when the German method is used. When examined with the microscope it is found to be made up of an enormous number of minute, rounded, or oval bodies, each of which is a separate plant. They are considerably larger than ordinary bacteria, so that growth and development may be observed with greater ease. The conditions under which growth takes place are somewhat rigid. Not only must the necessary food and moisture be present, but very considerable warmth is required. The infusion of malt, known as wort, is a very suitable medium for growth; it contains, amongst other substances, sugar and certain albumenoids. Let us suppose this liquid has been filtered so as to render it clear, that a little yeast has been added, and that a temperature of about 80° F. has been maintained; in a short time the clear liquid will have become turbid, bubbles of gas will be seen rising through the fluid, and a frothy mass will have formed on the surface. The liquid which at first was sweet to the taste, has lost that quality and has acquired a spirituous flavour, whilst the quantity of yeast has increased a hundred-fold.

When the process is examined under the microscope the individual yeast plants are observed to put forth one or more buds, which speedily become detached, arrive at full size, and recommence the cycle. This under favourable conditions will be continued, until all the sugar or products which the organism can convert into sugar are used up.

The essential chemical change which has taken place in the fermented liquid, as a result of the growth and multiplication of the yeast plant, is that sugar (grape) $C_6H_{12}O_6$ has been split up or reduced, and a tall tower composed of three kinds of blocks, 24 in number, $C_6H_{12}O_6$ has been rearranged so as to form four smaller towers, two consisting of three blocks each carbonic acid ($2CO_2$) and two consisting of nine blocks each alcohol 2 (C_2H_6O). The carbonic acid gas arises in bubbles and escapes, whilst the alcohol may be removed by boiling.

If we now carefully filter the liquid, raise it to the proper temperature, and re-sow therein the yeast plant as before, we shall find that no growth takes place, no alcohol is formed, and no carbonic acid gas arises. Some great change has been wrought in the liquid, either all food which the yeast plant can seize upon has been used up, or some product has been formed during the growth of the last colonies that are fatal to the development of the new plants.

In this respect we note a great resemblance between the manner in which yeast exhausts the fluid in which it lives and renders it incapable of supporting further yeast growth, and the manner in which such diseases as small-pox render the blood or other tissues of the body incapable of supporting the germs of a fresh infection in one who has within a certain period passed through the disease.

I may also point out that when the process of fermentation has been commenced in a suitable liquid, it is possible to kill all the yeast plants by heat, or remove them with a delicate filter, and that after their destruction or removal a certain amount of fermentative change will go on in the liquid, thus proving that the living yeast cells form a chemical product, which is capable of setting up by itself a preparatory stage of change or digestion. This chemical product is known as a ferment, and is similar to many other like substances. Take pepsin for example.

In milk there is a particular sugar—lactose—which has the chemical formula of $C_{12}H_{24}O_{12}$. Under the influence of the development of certain bacteria, this sugar, with a complex chemical composition, is converted into milk or lactic acid, with the much simpler chemical composition of $C_3H_6O_3$ which, by the block tower illustration, would appear as one high tower composed of 4 blocks, being reduced or simplified to four smaller towers of 12 blocks each. A similar change occurs when grape sugar is attacked, when the tower $C_6H_{12}O_6$ becomes two of $C_3H_6O_3$. Under the influence of other micro-organisms, the lactic acid is further reduced to butyric acid and carbonic acid gas, and so on, as the action of one set of bacteria is concluded, another comes into play, until at last such complex chemical structures as skin, muscle, and brain tissue are finally resolved to mother earth again in the form of the nitrates and nitrites of various metals. *Vide* the calcium nitrates seen adhering to mortar. *Vide* the immense beds of nitrate of soda found in South America, the sole remains of vast hordes of wild animals. What is true of animal tissues is equally so with the vegetable. In time the mighty oak returns to the mineral kingdom, from which its protoplasm when living had built it up. As conditions of various substances familiar to us all, the direct result of the action of bacteria, let me instance the rancidity of butter the ripening of cheese, the flavour and tenderness of kept flesh meat, and the putrid state when kept too long or under unfavorable conditions.

As a whole, is the action of bacteria baneful or beneficial? Undoubtedly beneficial. Had it not been for the action of these minute organisms animal and vegetable life would have disappeared from our globe long ago, for they are constantly converting the dead remains of animal and vegetable existence into substances with new living animals and vegetables may take up and make part of their organisms, which in turn give back their very bodies to re-clothe future and successive generations.

Up to the present I have said nothing of the form or manner of growth of bacteria. The varieties in shape may be reduced to a small number. First, there is the round or oval form, *Micrococcus*, to which special names are given when they occur in groups of 2, 4, or more. Second, *Bacillus*, rod-like. Third, *Spira-bacteria*, comma, vibrio, spirillum.

Bacteria multiply in two ways—(*a*) by building, as noticed in connection with the yeasts; (*b*) by spore-formation—which also goes on in yeasts, although I did not allude to it. This method resembles seed production.

Some bacteria are motionless, others have the power of movement. Some progress by an undulating movement, as an eel or leech in water, others do so by the aid of a minute whip lash at one extremity, or of a number of such tiny lashes projecting from the side and ends.

In speaking of fermentation, I have endeavoured to show how sugar becomes reduced to alcohol and carbonic acid gas, during the growth of the yeast plant. Also how milk sugar becomes reduced to lactic acid, and then to butyric acid, in consequence of the action of certain bacteria. I must now remind you that the sugars are comparatively simple chemical compounds compared with many substances which it is the function of bacteria to break down or reduce. Thus the chemical formula for grape sugar is $C_6H_{12}O_6$, that of (Lecithin) one of the higher fats is $C_{12}H_{84}NPO_9$,

whilst the formulæ of brain and muscle tissue are more complex still. Thus when micro-organisms exert their reducing power on these exceedingly complex substances, the first chemical products of such reduction may be exceedingly complex also. Many of them are highly poisonous, and are referred to in the newspapers as ptomaines. Thus we hear of ptomain poisoning.

Scientifically, these chemical substances are divided into three classes: 1. Ptomaines or alkaloids; 2. Abumoses or tox-albumens; 3. Enzymes.

The two former are directly poisonous; the enzymes are ferments, harmless in themselves, but have the power of inducing chemical changes in proteid substances, to form poisonous albumoses.

As an example of the first group, I may mention "Cadaverin," an alkaloid formed during the putrefaction of flesh $C_5H_{14}N_2$.

The poison of the albumoses is allied to that, formed by living snakes.

Bacteria of Disease.

For our purpose this evening we will divide bacteria into two classes: (*a*) Those which are known to produce disease by their action on animals. (*b*) Those against which no evidence of such is at present forthcoming. In speaking of particular micro-organisms as the actual agents in the production of certain diseases, it will be well if I read to you the conditions laid down as determining whether such is the case or not. They are known as Koch's postulates.

1. The micro-organism must be found in the blood or other tissues of the man or animal suffering from, or dead of the disease.

2. The micro-organism must be isolated from the blood or other tissue and cultivated outside the animal body, and these cultivations carried through successive generations.

3. This pure cultivation must when introduced into the healthy animal produce the disease in question.

4. In the inoculated animal the same micro-organism must again be found.

This recital will incidentally inform you that most of the pathogenic – that is, disease producing—organisms can be cultivated upon and in various substances and fluids outside the body of animals. Some of the favorite media for such purpose are beef-tea, gelatine, milk, raw potato, etc.

Certain conditions must be observed in the cultivation of bacteria: First, a certain amount of *heat* is necessary. If this is not supplied, the organisms cannot develop. It is due to this fact that many animal and vegetable substances can be kept from putrefaction for an indefinite period, if the temperature is low enough. Ex: frozen mutton, and rabbits from Australia. Again, if the heat is too high, either the organisms are killed or they cannot develop. The temperature of boiling water, when a moist heat, is sufficient to destroy most bacteria, but not always the spores or seeds. Between these two extremes great variation exists as to the warmth necessary for the growth of different organisms.

Some organisms can only develop when oxygen is present in the gaseous form. Others can develop in its presence or in its absence. Whilst others are unable to develop in the presence of that gas. There are also many substances in nature, as well as others formed during chemical processes, which can arrest or prevent the development of micro-organisms, and even destroy their spores. The ancients knew well that certain balsams and spices had this property and made such use of them that by the process of embalming, the bodies of human beings and animals have resisted putrefaction from their day to this present. The long list of antiseptics and disinfectants is that of substances possessing the quality I am referring to.

Let me now turn your attention to several diseases consequent on the development of bacteria within the animal body.

1. Wool sorter's disease, malignant pustule, anthrax, a deadly disease of man and certain animals. *B. anthracis.*

2. Glanders, a fatal disease in man, the horse, and certain other animals. *B. mallei.*

3. Tuberculosis, a fatal disease in man, cattle, horses, many mammals, and birds. *B. tuberculosis.*

4. Lock-jaw. Tetanus, a fatal disease of man and animals.

5. Septiæcemia in mice. *B. of septicæ*: of mice.

In an animal dead from *anthrax* the bacilli may be found in the blood in almost every part of the body. In *glanders* the bacilli may be found in the lungs, in ulcers all over the body, and in other parts. *Tuberculosis*, they may be found in the lungs, liver, and many other parts of the body. In the *septicæmia of mice*, in the blood, and in other tissues all over the body. But in *lock-jaw* the bacilli are only found about their original point of entry.

Immunity.

Another phenomenon I wish to explain is that of immunity. Inoculation with the B. of anthrax will kill man, many animals including guiuea-pigs and mice, but will *not kill rats.* Inoculation with the B. of glanders will kill man and horse, but not cattle. The B. of septicæmiæ of mice is most deadly to the house mouse, but is non-fatal to the field mouse. Thus we see that certain animals are immune to diseases produced by certain micro-organisms. Occasionally it is found that individual animals possess an immunity which its species does not possess. Further we know that after having survived some diseases, the animal possesses an immunity against same disease for a considerable period: *vide* small-pox. We also know of methods in which inoculation of certain products will prevent, counteract, or minimise, the effect of action of particular micro-organisms. Thus you will see that *immunity* may be natural or acquired.

In connection with the subject of immunity, it is well to note how races of human beings become in course of time less and less seriously affected by infectious diseases which may be introduced amongst them, or due to climatic and other local influences which are favourable to the development of particular organisms. As an example of the first group, we may notice the disease measles. In this country, where the majority of the population for generations have been affected by it, we notice that our children, although much prostrated, only die in a small percentage of cases, whilst the disease in adults is rare. In a community, however, which has never had the disease, when once introduced, it is a terrible plague with a frightful mortality amongst both young and aged. Syphilis affords another example of this fact.

An example of the second group is seen in the mortality amongst Europeans when in tropical and malarial districts, as compared with that of the natives.

I think you would be interested in a brief sketch of some of the facts in connection with acquired immunity, and the new methods gradually being adopted in the treatment of some infectious and contagious disease in consequence thereof.

The bacillus which produces anthrax exists in the soil of pasture lands and gains access to the body of sheep and oxen when grazing. It develops therein at an enormous rate, and produces a poison, or toxin, which results in death.

One drop of blood from a diseased sheep injected into a healthy one will cause death in 24-48 hours.

The anthrax bacillus can easily be cultivated in beef tea, gelatine etc., and when so grown is equally deadly as the blood of an affected animal. But experiments

have proved that by growing the bacilli at certain temperatures on the one hand, or of introducing certain chemical agents into the nutrient medium on the other, the bacilli not only lose their power to kill the animal into which they may be injected, but the very products of their growth in the blood of that animal are such as to prevent the normal deadly bacilli, if subsequently injected, from having a poisonous effect. (Pasteur's experiments at Melun, 1881, 50 sheep). It has been shown also that the bacillus anthracis cultivated in a special medium, gives rise to a substance which may be filtered absolutely free of the bacilli and its spores, and when injected into the blood stream of a rabbit will give immunity when afterwards inoculated with virulent blood, nay more, if a little of this fluid be mixed with the infected blood, and the mixture injected into a rabbit no harmful effect follows.

The disease hydrophobia in man, and rabies in the dog is due to the development in the system of a poison doubtless elaborated by a micro-organism, although none such has yet been definitely identified. This gains access by the wound inflicted by the bite of a rabid animal. Although this poison is present in the saliva, yet Pasteur has shewn that it exists in greater quantity in the brain and spinal cord. Experiment has established the fact that if a little of the spinal marrow be mixed with water and injected into a monkey, that animal will die of rabies. If a similar fluid be prepared from the first monkey and injected into a second, and so on to others successively, it is found that the monkeys no longer die. If at this stage the spinal cord of the last monkey be in like manner injected into the dog, and at intervals portions of the preserved spinal cords of the other monkeys are so injected in the ascending order as they were killed, a point is reached when that dog may be submitted to the test of inoculation with the most powerful poison, or bitten by a rabid dog, and no evil results will follow. Not only will the methods of passing the virus through a series of monkey result in this marvellous attenuation and protective value, but another and better method has been devised by the same man, viz., inoculate a rabbit with the poison it dies of rabies, then a portion of the spinal cord of the rabbit is suspended to dry in a particular manner in from 16 to 20 days the condition of attenuation which will not produce rabies is arrived at. From this starting point a dog is inoculated as before, and at intervals with the product of spinal cords which have been suspended a shorter and shorter interval; at the end that dog will withstand the most deadly rabific poison which is known.

The bacillus of tetanus (lock-jaw) is one which lives in the soil, and deep in manure pits of stables. It gains access to the body through a wound, sometimes a most trivial one. One of the peculiarities of this microbe is that it does not invade the body generally, but remains at and around the point of entry. Here it grows and reproduces its species, and in so doing a poison, a *toxin*, is produced, which is caught up by the blood stream and conveyed to the nerve centres which in turn are so stimulated that the terrible muscular spasms of lock-law are produced. There is no doubt that a chemical product or toxin is the cause of these symptoms, for it is easily possible to cultivate the bacilli outside the body, then to filter the fluid in which they have grown, and heat the filtrate so that no trace of life remains. This fluid when injected into an animal produces all the former effects.

We note then that—

(*a*). It is possible to specially cultivate a deadly bacillus, that when introduced into a living animal does *not* destroy life, but actually preserves life against that disease.—*Vide* Anthrax.

(*b*). That the filtered product of a deadly bacillus when specially cultivated out of the body has the power of rendering harmless virulent blood, for if the two be mixed and injected no harm results.—Anthrax.

(*c*). That virus may be attenuated and rendered protective by passing the same through a series of certain animals, or by drying in a particular way the tissue in which it rests.—Rabies.

I have shewn you how a poison—toxin—is produced during the growth of the bacteria of tetanus, and how that poison produces all the symptoms of the disease. This toxin having been prepared and perfectly separated from the producing bacilii may be diluted and mixed with iodine, then this product if gradually and progressively injected into an animal—say a horse—for a considerable period, it is found that it is impossible by any means to produce lockjaw in that horse. A great deal more happens, for if blood be taken from that horse, and the watery part of it—serum—be injected into another horse, then that second horse is found to be immune, *i.e.*, will not take on lockjaw when the bacilli are introduced. The protective substance which the serum contains is known as an anti-toxin. This is the secret of the serum treatment for diphtheria.

The toxin resulting from the cultivation of the bacteria of Diphtheria is in like manner gradually and progressively introduced into horses for the requisite time. Then the blood is abstracted, the fluid portion of which is separated, and then used for the inoculative treatment of diphtheria. The anti-streptococcus serum for treatment of puerperal fever is a similar preparation.

It has been shewn that the blood serum of a rabbit rendered immune against tetanus, or diphtheria, has no destructive or retarding effect on the bacilli, but that it possessed the power of *neutralising the poison* developed during the growth of the bacilli. That is to say, the serum possesses an anti-toxic power, and not the power of killing the bacteria.

The toxin obtained by the cultivation of the bacteria of glanders, known as mallein, has proved a most valuable test for diagnosing or discovering the presence of that disease in horses when every other method has failed. The same may be said of tuberculin, which is the toxin of the tubercle bacillus.

The serum treatment of typhoid fever, and the "clumping" of the bacilli test for typhoid were explained.

Mr. Wolstenholme then passed on to refer to the technique in the cultivation of micro-organisms, and exhibited a number of cultures.

He exhibited a new German autoclare, a Chamberland filtre, a new syringe by Dr. Roux, and a variety of other instruments in conection with the subject.

In conclusion he referred to the increased facilities for studying the science, and hoped the paper and discussion would emphasise the need of keeping abreast with the tide of discovery.

Discussion.

The President complimented Mr. Wolstenholme upon his admirable and instructive paper and emphasized the importance of veterinarians becoming bacteriologists.

Colonel Lambert, addressing Mr. Wolstenholme, said he assumed it was well established that the bacillus of tetanus located itself near to the injury.

Mr. Wolstenholme: I cannot say. As a matter of fact by experiment and observation both during life and after death it is said that the bacilli are not to be found in the blood and other tissues, but only at or about the point of entry.

Mr. S. Locke: In cases of bacillus of tetanus we have had recovery very often by attacking the injured portion either by actual cautery or excision, and this leads me to believe that we have destroyed the virus.

Mr. New: Is it a recognised fact that there are cases of tetanus without a wound?

Mr. WOLSTENHOLME: It is very difficult to say. I believe that if you ask Dr. Delépine he would tell you that in his opinion there was no tetanus without a wound.

Colonel LAMBERT asked the members whether they often had a great many wounds without any case of tetanus, or whether they thought it was a contagious and soil produced disease, and if so whether it occurred more in certain districts than in others.

Mr. WOLSTENHOLME: I might point out that in certain earths if you take any weapon, dip it into this earth and then stab some animal you may depend upon having tetanus.

Mr. HOPKIN pointed out, in confirmation of the remarks just made by Mr. Wolstenholme, that a veterinary surgeon from Chesterfield had given the Association the percentage of cases of tetanus in a year, and it was enormous, and had stated that certain portions of the district were noted for tetanus. As to idiopathic tetanus it was very difficult to say whether or not a horse or animal had received a scratch quite sufficient for inoculation, on account of the hair covering, but he would like to have heard whether those cases arise in the human subject, because it would be easier to detect in the latter.

Mr. FAULKNER thanked Mr. Wolstenholme for his most interesting and instructive paper. Cases of tetanus, which he had noticed on several occasions and which he understood to be the idiopathic form of tetanus he now believed were due to wounds unobserved owing to the character of the covering of the patients.

Mr. MUNRO said he had seen cases of tetanus generally in small punctured wounds, but not in large ugly gashes. How did Mr. Wolstenholme account for this?

Mr. WOLSTENHOLME: Of course, I am only retailing to you what I have read, and heard, and one has to apply his own general knowledge. For example, the bacillus of tetanus cannot develope in the open air, but has to develope away from free oxygen, so that you can quite understand that in the case of punctured wounds deep in the blood vessels there would be a suitable ground for the growth of the bacillus, whereas in a skin wound—quite exposed to the atmosphere—the bacillus would be more likely to come in contact with the oxygen.

Mr. CHALLINOR: It is a subject that we really hear a lot of from our clients, and I think it is very wise for us to know something about it. As to Chesterfield, it is a colliery district and this I think will be the reason why it was noted for tetanus. You have tetanus from superficial as well as from other wounds. I have seen rather more from superficial wounds.

Mr. WOODS proposed that a very hearty vote of thanks be given to Mr. Wolstenholme for his valuable and interesting paper.

Colonel LAMBERT seconded the motion, which was unanimously carried.

The Royal Institute of Public Health.—Congress in Blackpool.

The annual congress of the Royal Institute of Public Health will be held this year in Blackpool from Thursday, September 21st, to Tuesday, September 26th, 1899 (both days inclusive).

The Congress will be arranged in four sections, viz.:

(*a*) Preventive Medicine and Vital Statistics.
(*b*) Chemistry and Meteorology.
(*c*) Engineering and Building Construction.
(*d*) Municipal and Parliamentary.

And Conferences will take place of:

(*a*) Medical Officers of Health.
(*b*) Port Sanitary Officers.
(*c*) Veterinary Surgeons.
(*d*) Sanitary Inspectors.
(*e*) Ladies on Domestic Hygiene.

IRISH CENTRAL VETERINARY ASSOCIATION.

A meeting of the members was held on Wednesday evening, April 26th, at 6 o'clock in the Grand Central Hotel, Belfast, J. Freeman, Esq., F.R.C.V.S., Dublin (president), occupied the chair. The following members were present: Messrs. M. Hedley, Chief Inspector Veterinary Department, Dublin Castle; McKay, Belfast; Dawson, Cavan; Thompson, Purdy, Belfast; Thompson, Lurgan; and A. Watson, Dublin, acting as secretary *pro tem.*

Mr. HEDLEY objected to the minutes being signed owing to their ambiguity, but finally consented upon a note being made of his protest.

NOMINATIONS.

The following were proposed as members of the Association by Mr. Freeman and seconded by Mr. Hedley, Mr. THOMPSON, M.R.C.V.S., Lurgan; and Mr. EWING JOHNSTONE, M.R.C.V.S., Belfast.

Mr. HEDLEY proposed that the rules of the Association be submitted to the Executive Committee for consideration and report for next general meeting.

Letters of apology were read by the President from Messrs. Cargill Patrick, Ballinasloe; Martin, Enniskillen; J. J. Ross, J. E. Johnstone, Belfast; P. J. Howard, Ennis.

Mr. HEDLEY gave a report that over 55 new members were added to the membership of the National Veterinary Association.

Mr. THOMPSON (Lurgan) apologised for the sparse meeting, as he quite forgot it was so long since the Secretary had written to him.

PRESIDENTIAL ADDRESS.

J. FREEMAN, F.R.C.V.S., Dublin.

Gentlemen,—In taking my position this evening as President of the Central Veterinary Medical Association of Ireland my first words to you must be an expression of thanks for the great honour conferred on me which I recognise and appreciate to the fullest extent. When I look back on the manner in which our late President initiated this Society, and the success it has attained under his generalship, I feel acutely my inability to do justice to the occasion, although I shall earnestly strive to justify the confidence which you have reposed in me. that, when I come to relinquish the chair, even if I have not quite attained that high standard of excellence which my predecessor has set up, I shall at least be conscious of having done my duty. I have taken the keenest interest in this Society since it was started, and my sole aim will be to enhance its usefulness, and with a good attendance of members at our meetings, backed up by a free interchange of views much benefit will accrue from our deliberations and discussions As time is limited my remarks will be few and confined to some of the events of interest to the veterinarian during the year.

Tuberculosis and its eradiction is at the present time occupying the minds of many, and as experiments proceed and the high per centage of reaction to the tuberculin test of animals in apparently the pink of condition and health, selected with the greatest possible care and kept under the most rigid hygienic surroundings, if, in herds of cattle under such conditions 25 to 30 per cent. react to the test; the difficulty, not to say the impossibility, of eradicating tuberculosis from among the domesticated cattle of the country becomes more and more apparent. Many suggestions have been made

but I am afraid the day is far distant when the problem of dealing practically with tuberculosis is solved.

With the aid of tuberculin the diagnosis of the disease, once so difficult, is rendered easy, and if all clinically affected animals are destroyed, and all animals with any abnormal defect in the udder tested, and any reacting, compensated for and destroyed, I think the public might so far as milk is concerned be assured that the risk run by its consumption will be infinitesimal.

As regards the infallibility of tuberculin as a test for tuberculosis, Professor McFadyean, in the March number of *The Journal of Comparative Pathology and Therapeutics*, draws attention to a possible source of error and that is in the character of the rise of temperature, he notes a gradual rise as being characteristic of the disease; a sudden rise is always to be regarded as suspicious.

A recent discussion with regard to acquired immunity said, by some, to be produced by the constant injection of tuberculin is worthy of notice.

You will have observed that there has been a discussion in the Council with regard to a new degree in Public Health, brought forward by Professor W. O. Williams, and opposed by others on the ground that the present veterinary degree renders any additional training unnecessary.

Lieutenant Rose has introduced a new method of dealing with canker of the foot, and if his method is as successful as he claims for it, I have no doubt it will be hailed with delight by many practitioners who have been sorely disappointed with the former treatment.

To Professor Hobday the best thanks of the profession are due for his admirable clinical articles on canine and feline surgery, which are unique in their way and afford the busy practitioner an admirable experience in many difficult cases.

The Carlisle cruelty case will furnish food for much reflection, and the conflicting expert evidence does not tend to elevate the veterinary profession in the eyes of the general public. The gigantic rush of the Border veterinarians to join the Mutual Defence Society was not without humour to the onlooker, but proves that an individual feels the necessity of the support of such a Society in a case of the sort.

The new dog disease, or the Stuttgart dog epizootic, so far as I am aware of, has not been seen in Belfast, but as it has been prevalent in many parts of England and with recent dog shows held in various parts of the East of Ireland where many of the dogs exhibited were English, no doubt sooner or later it will appear, and anyone that has read *The Veterinary Record* and *The Journal of Comparative Pathology and Therapeutics* will have little difficulty in diagnosing the foreign invader.

At a meeting of the Irish Central Veterinary Medical Association held in Dublin last January, a committee was deputed to wait on the Irish National Veterinary Association and make such arrangements as might seem necessary for the purpose of inducing the National Veterinary Association to come to Ireland in 1900, the result I am pleased to say has not been fruitless, and we have every reason to hope that they will be induced to visit us, and be accorded a truly Irish welcome.

In conclusion, I feel it my duty and it gives me extreme pleasure, to draw the attention of the profession to the admirable arrangements made on behalf of the Local Authority Veterinary Inspectors under the new Local Government Bill, which carries them over as existing officers to the new County and Borough Councils, leaving the adjustment of salaries to an official of the Local Government Board provided for the purpose, when the Local Authority boundaries run into more than one county. It will thus be seen that if a Poor Law Union at one time ran into say three counties, instead of the Local Authority veterinary inspector being dispensed with, and his three sections given to others, he will continue to exist, but his salary will be paid without deduction by each of the three counties proportionately, the proportion being decided as I have already pointed out, at least this interpretation is the one I am led to believe is correct. Any modification will be infinitesimal. (Applause.)

A vote of thanks was accorded to the President (Mr. Freeman, Dublin) for his able address, proposed by Mr. Hedley, and seconded by Mr. Thompson (Lurgan) and carried unanimously.

SOME DISEASES OF THE TENDONS AND THEIR SHEATHS.

By A. Watson, M.R.C.V.S., Dublin.

Gentlemen,—I am afraid I cannot offer you any startling revelations in the field of pathological research, for the subject which I have chosen has been subjected to the criticisms of so many prominent veterinarians, that indeed I am rather surprised at my own audacity, and yet, I think the lesion vulgarly spoken of as "sprain of the back sinews" is of so much importance in our practice, and the result of the various forms of treatment has been so unsatisfactory to our patients, our *clientièle*, and ourselves, that it seems to me to well deserve careful discussion at our hands.

A doctrine advocated by Professor Williams has always caused me to pause and consider, and it is with no little fear that I can bring myself to question its truth, considering the personalty of its expounder, I quote the sentence which reads as follows:—"The so called sprain of the back sinews is not primarily in reality (mark the words "is not primarily in reality") a lesion of the flexors tendons proper, nor of their thecal, but consists of a diseased condition (mark again "a diseased condition") arising from over extension of the metacarpal or metatarsal check ligaments." I could never see why there must be any "diseased condition," or "over extension of the check ligament," and I fancy that if the word auxiliary were used instead of check, it might more truly describe the functions of the ligament.

I will leave this for a few moments till I describe some peculiarities of conformation and structure of the tendons which leaves it open for them to be the seat of the primary lesion without any fault attributable or contributable to the so called check ligament.

That there are horses with large but soft tendons, large muscular heavy bodies, must be known to us all, and in my experience it is this class of horse which is most likely to be the subject to tendinitis. I would ask you to observe the horse with the nine inches below the knee (to use the phrase of the sire advertiser) and let him come to do any hard work or severe training and see how long he will last without requiring rest, liniments, the vesicant or the firing iron. No, whilst, I must not be taken as condemning all horses as being of the soft order which have nine inches below the knee, yet in a great number of cases the absolute thickness is not at all in the direct proportion to the strength or resisting power of the parts; not infrequently the conviction has been borne in on me, that the large legged and the heavy muscular horse is wanting in the grit which characterizes his smaller brother, and if the horse with the hard, sharply defined tendons gets a strain, the recovery is much quicker and more thorough.

There is a peculiar conformation which consists in being "tied in below the knee" and a long slender pastern which very commonly induces tendinitis upon the animal being called upon to perform even a slightly increased amount of work more than ordinary. Low heeled and long toed horses (if I might be allowed to

coin a phrase) are also subjects to easy attack. In some instances which came under my observation, decided changes in the back sinews manifested themselves during the convalescent stage of influenza, converting the hard decided tendons into soft swollen flabby structures, which, upon the animal being galloped went irretrievably wrong. In spite of all remedial treatment they had to be trained for harness.

Some veterinarians assert that spirited horses are more liable to tendinitis than the phlegmatic. I would certainly give a direct contradiction to this assertion, and I would ask the opinion of gentlemen here as to the accuracy of the statement. There is considerable difficulty in describing to another the sensation felt upon handling certain parts, and yet the niceities of distinction so conveyed are as actual as the varied differences of pathological structure to the accurate observer. Some time ago I was the owner of a thoroughbred mare which would be described as having bad forelegs, in fact she was what might be truly described as leggy, and yet upon handling the tendons and bone she felt so hard, firm and flinty, that you would know she was fit to gallop on any ground and yet, though often raced upon ground as hard as adamant, her sinews never went wrong in the slightest.

No, gentlemen, I would disagree with the learned Professor, for in a great number of cases before the over extension of the check ligament has occurred, the weakly, ill-conformed perforans or perforatus tendons had given way from a want of cohesion or tonicity of their histo logical elements. I am of the opinion that it is this want of cohesion which in a large degree causes the cart horse to be so liable to this lesion, and if only their tendons were as perfectly developed as their muscles, results would be very different. No, gentlemen, in the breeding of the cart horse the large hairy leg is sought to be propagated, whilst the flinty leg which will stand the test of hard work is discarded : utility is again sacrificed for fashion.

I speak to men all of whom know the advantages of the cross-bred Irish horse. Take him as he is, he may not fill the shafts of a brewer's float as well nor carry the absurdly heavy harness with its useless brass trumpery, but put him to work and he is sound and working when the Clydesdale and Shire have exhausted your patience and defied your embrocations and blisters, in your endeavours to keep them sound.

This softness is nowhere more resident than in the tendons. It may have been my individual lot to come across this condition, but by far the greatest percentage of leg lameness—mark you, I say leg lameness, lies in the perforans and perforatus tendons of themselves, the check ligament remaining unimpaired. Now don't mistake me, I ascribe full value to the heavy loads and to shoes with the toe pieces and high calks, but I claim that want of cohesion in the large tendons is the essential factor.

Inflammation may arise from direct physical violence or from excessive muscular action, and in a number of these cases the perforans is the tendon involved, because the muscular head of this tendon is much the stronger. Let us take a case where the tendons have been injured, in fact lacerated to a considerable extent, and should it be a patient with the right description of tendon, is it not surprising how soon restoration to functional use can be accomplished and how little the ultimate usefulness of the animal is affected.

Rheumatism is in rare cases the cause of tendonitis, and whilst it is generally the great muscles of the lumbar and gluteal regions which are affected, yet in the form which is known as the influenza one, every tendon of each leg seems to be involved, and it is with great difficulty we can effect a cure. In fact, one's best efforts yield but doubtful results so firmly established seem the structural changes.

Concussion as the result of jumping is also a cause of tendinitis, especially if the horse is not fit or if his muscles be not in due proportion to his tendons. After severe runs with the hounds horses "pull-out" the following day, stiff all round, all the legs being more or less what is vulgarly spoken of as "stocked." But this is more a condition of tired muscles than an affection of the sinews.

Möller says inflammation sometimes extends from the tendons sheaths or articular surfaces to the flexor tendons, and the form associated with infectious diseases and occurring during convalescence from thoracic influenza always starts in the tendon sheaths. Personally, I cannot subscribe to this theory. I would ask the opinion of those present on this point, as there is a doubt on my mind as to the absolute truth of the doctrine. The tendon sheaths which principally come under observation are those in the hind leg forming what is anatomically known as and forming the bursa of the extensor pedis, the bursæ at the point of the calcaneum, the flexor pedis perforatus tendon, and the internal divisions of the flexor metatarsi tendons. Distension of these bursæ may assume rather goodly proportions, and yet cause the patient little or no inconvenience, in fact I have seen them disappear without any interference or treatment. But acute inflammation sometimes arises from external injuries and we have then to face a most dangerous complaint—tendovaginitis, and it is with difficulty we can prevent it assuming a septic character. In these cases the fever runs very high, and the lameness most intense, involving inflammation of the joint. The bursæ of the flexor pedis perforans and perforatus at the knee are frequently the seats of inflammation, results of bruises or wounds. The swelling usually appears on the outer side of the joint, both above and below, rapidly assuming considerable proportions. The symptoms of all are more or less the same, lameness, heat, swelling, wincing under pressure. The limb is held and carried stiffly, and when the affection is near the joint there is distinctly imperfect extension and flexion, and where the tendon sheath is involved a swelling from distension of the bursa. Palpation will readily detect the various parts and to what extent they are affected.

If rupture has taken place, there will always be a complete inability to bear weight on the limb or if it is placed on it there is a very remarkable flexion, and the toe of the foot is directed upwards. As there is nothing very special to be learned from a further discussion of the symptoms, every practitioner forming his own opinion from his own practical observation on the cases, I will dismiss this part of the subject and come to another section.

Prognosis.

The prognosis in all cases of strain of the back tendons is essentially unfavourable, as serious infiltration takes place into the interfascicular connective tissue and paratendineum, and the reparative process is low, the blood supply being so deficient; shortening is bound to take place when the more active inflammatory process is complete in consequence of cicatricial contraction.

If, however, the tendinitis is the result of an external injury, and that the reparative process is complete, our opinion will be entirely formed by our analysis of the tonicity of the structures, and if we can guage this quality correctly our prognosis will be correct and our treatment will be successful—due allowance being made for right conformation and the work at which our patient is employed. When we find the suspensory ligament involved it is certain to be a serious case, and likely to be oft recurring under trivial provocation. In next importance comes the perforans, then the perforatus. The older the case the less the chance of recovery and with more than one affected the gravity is increased.

I will not trouble you with a description of the morbid anatomy of the structures when complicated with inflammation, as there can be no difference of opinion as to its course or the variety of its termination.

TREATMENT.

We will now briefly discuss some of the modes of treatment with a view to eliciting your opinions as to the shortest and best way of producing the most satisfactory results. This part of pathology is, to my mind, in anything but a satisfactory condition. In the case of rupture of the tendons the parts are to be brought as nearly together as possible and fixed, the animal having previously been slung. I have found that it is advisable to first apply a bar shoe into which is let an iron splint and brought up as high as the elbow or point of the hock. Plaster bandages will be found very useful in giving support to the parts. After our patient has been five weeks in this position, I would remove the slings and with uniform extension and flexion try to produce pliability. Massage is to be recommended as it undoubtedly materially assists not alone in strengthening the parts but also in removing the exudate which is thrown out, and which has become redundant.

In all cases where rupture, that is to say complete disseverance of the tendons has occurred, it is impossible to avoid a certain amount of contraction. In the case of rupture following disease of the bone, as it is sometimes seen in young foals, no good results are likely to ensue from any known treatment, and it is the most merciful, not to speak of economic advice, to have the animal destroyed.

There is a record of the rupture of the flexor tendons in three separate limbs, but such cases are indeed rare. We all have seen in our post-mortem cases resulting from caries of the navicular bone producing extensive necrosis of the tendons, which would certainly have become ruptured upon very slight provocation.

Where we meet distension of the bursa resulting from injury to the sheath the question arises as to advisability of puncturing. Personally, my first impressions after this operation gave me hope that it was the only remedy. Success seemed to smile on my endeavours, but I found afterwards in a good many cases an extensive inflammation set in with high fever. In fact so alarming were the symptoms that the lives of the animals were endangered. Probably these symptoms were the result of imperfect asepsis, for since I have made it a point to sterilize all instruments and thoroughly cleanse the part results have been more assuring.

I would here wish to bring before the notice of veterinarians an excellent sterilizer recently patented by a distinguished Dublin surgeon, George Burbidge White, Esq., F.R.C.S. It is very simply constructed and most portable, being made with an inner moveable chamber in which the instruments and dressings can be taken to the case, having been sterilized before leaving our pharmacy.

In a goodly number of cases I have evacuated the bursa only to find it filled again, in spite of the assistance of uniform pressure, which, by the way, is a matter of the utmost importance. Should there be an external wound antiseptics must be freely applied, and the parts protected in order to prevent contamination. Some recommend injecting a weak solution of iodine into the bursa. Care should be observed, as not infrequently it creates tremendous constitutional disturbances, although the after effects are undoubtedly good. Blistering, firing, and a variety of medicated unguentums are resorted to with an equal variety of results. An excellent plan which has yielded very good results in acute cases of bursitis is the application of a large pack of cotton wool, over which I place waterproof and then a good bandage. This I can recommend as having given satisfaction.

In the case of tendinitis our treatment will be best dictated by the position and extent of the injury. Of course much controversy arises as to whether cold or hot applications should be used. In my opinion the great pain of an extensive injury is always more effectually diminished by fomentations than by cold water. After the more acute symptoms have subsided the wet pack will materially assist in the restoration of the parts to their normal condition. If, however, the injury is not too severe, long continued cold applications, as by immersion or irrigation, will often give relief. Wet packs, either hot or cold, properly applied with waterproof are very excellent and strongly to be recommended, but care must be bestowed, as both the moisture and equalised pressure favour reparative changes and prevent excessive extravasation. A number of ointments are in daily use for the absorption of the inflammatory exudate, both mercury and iodine being much vaunted for their properties in this direction. It has often occurred to me that the old woman's cure of goose grease will give equally good results, as they all require a large amount of rubbing, and it is the massage which really effects the cure.

The liniment of iodine acts well both in the capacity of stimulant to the absorbents and counter-irritant, as does also a mixture of the liniment of iodine with soap liniment, which has the advantage of not staining the skin, and particularly in the case of white legs. In mild cases of tendinitis Elliman's embrocation, or liniment terebinthinæ album is satisfactory. Amongst the older veterinary practitioners arnica was their sheet anchor in all cases of sprains and bruises, and much benefit was ascribed to it. It has been relegated to obscurity, as it is now known that it was not the arnica which was potent but the spirit which held it in solution.

A very popular nostrum amongst country folk is a hot watery solution of the Althæa or Marshmallow root for the reduction of inflammation and the prevention of suppuration, but I fear the hot water by itself gives equally good results, although in human medicine an ointment of this plant is sometimes recommended in the treatment of palmar psoriasis. Cow-keepers will not be content except you prescribe what is called "wash" for all fomentation purposes, and I admit it does remarkably well but only in virtue of its warmth, and then it is very handy and its heat is always very high, which is more than you can get if you prescribe water for the fomentations. Poulticing with linseed meal or mashed yellow turnips, in fact with any agent which combines heat and moisture, is of material service in alleviating pain and reducing inflammation, and there are some cases of tendinitis which do remarkably well under this line of treatment. If in the neighbourhood of a brewery where "spent hops" can be procured I prescribe them, and find them an excellent poultice; frequently, however, their practical application is difficult, as their weight makes them sag, and if what I might describe as "skilled labour" is wanting, such applications are inadmissable. Natural sheep's wool steeped in linseed oil (or for that part any other oil) which has been previously heated can be supported and kept in close juxta-position by the aid of a bandage, and by its application all the advantages of poulticing are secured, with none of the untoward consequences. A very powerful anodyne and sedative is a mixture of the liniments of aconite and belladonna. After we have tried all our milder remedies not infrequently will the applications of good sharp cantharadine blister give marvellous results in a few days, in fact, our case which has hung in the balance for weeeks, is able to resume work when the action of the blister has ceased. Like every other practitioner I have fired those cases, and particularly where old thickenings exist, but most candidly confess that firing is not a success, and as to its strengthening weak tendons, I am a non-believer.

It, however, suits our *clientièle*, gets us an extra fee, and has an innumerable host of witnesses and is likely to remain in practice as good sound surgery.

In many cases contraction takes place after one attack of tendinitis, whilst in others it only follows as the result of frequent attacks, and it becomes a question of firing or blistering and, if the case is very pronounced, tenotomy.

I have seen very satisfactory results in mild cases of contraction from the simple application of Archangel tar, well rubbed in from the knee down to the coronet, and the patient turned out to grass. This reads very gross and smacks very largely of quackery. Well, I am bound to say that I scoffed when the idea was first mentioned to me. Upon trial of it, I was compelled to admit that it did a great amount of good, strengthening the parts and keeping the animals sound for many months after, although they were of the light draught order. Doubtless, I will be met by some who will say it was the run on grass that performed the miracle, but no such thing, for I tried it both ways and found the tar treatment give very much better results. Mr. McKenny, veterinary surgeon, of Dublin, has a very excellent liniment which he calls "absorbine," and which in all bursal enlargements and chronic thickening undoubtedly supplies a long felt want, reducing them in a very short time.

The effects of blistering and turning out on grass is too evanescent, the horses being put to work too soon tells the tale that the prescription was a failure. Another very good application is a blistering plaster, for it seems to give support to the part whilst the blistering agent brings about absorption of the thickening.

(*To be continued.*)

YORKSHIRE VETERINARY MEDICAL ASSOCIATION.

The spring meeting was held on Friday, April 28th, at the Queen's Hotel, Leeds. The chair was occupied by the President, Mr. T. Fletcher, of Sheffield, and those present included Messrs. G. E. Bowman, J. S. Carter, Bradford; J. Clarkson, Garforth; J. Cooke, Scarboro'; F. W. S. Clough, Morley; A. Gentle, Otley; W. F. Greenhalgh; Hollings, Methley; J. W. Lazenby, Boston Spa; A. W. Mason; J. McLean, Dewsbury; R. Peech, Rotherham; J. E. Scriven, Tadcaster, (hon. treas.); H. Snarry, F. Somers, York; C. S. Smith, Barnsley; W. T. Schofield, Pontefract; A. T. Waller, Skipton-in-Craven; G. Whitehead, Batley; A. McCarmick, (hon. sec.), and a visitor.

The SECRETARY reported that there was a balance of over £12 in hand in connection with the fund raised for the entertainment of the National Conference of Veterinary Surgeons, which was held in Leeds in 1898, and it was resolved to appropriate the amount to the general funds of the Association.

THE CARLISLE CRUELTY CASE.

The PRESIDENT then drew attention to the case in which Mr. J. W. Hewson, of Carlisle, was prosecuted by the R.S.P.C.A. for cruelty. He had, he said, asked the Secretary to place the matter on the agenda, because he considered it a most important matter which raised the question as to whether they should, as a profession, be trampled down by the R.S.P.C.A. The Society was very rich, and consequently very powerful, and they knew not how soon any of them might come under its ban for using a twitch, or what they might think too strong a caustic, and perhaps even for firing a leg without the use of an anæsthic. No class of men were more careful not to cause unnecessary pain to a dumb animal than the veterinary surgeons of the present day, but there were times when they must cause pain to protect themselves and to cure the animal from the disease from which it was suffering. Were they, then, to allow the officers of this Society—men collected from all grades of trades and businesses, except those having any knowledge of physiology and pathology—to step in and tell them they were guilty of committing acts of unnecessary cruelty? He said they must not—(applause)—they must show not only by their words but by their acts that this should not be, and he appealed to all veterinary surgeons who were true to their profession to band themselves together and go to the help (pecuniary and otherwise) of a brother professional who was placed in a similar position to that of Mr. Hewson, of Carlisle. (Hear, hear.) Their united thanks were due to those gentlemen who appeared for Mr. Hewson on his appeal trial, and although their thanks were due to each one alike, he could not help mentioning their old friend Professor Williams—(hear, hear)—who once more stood in the breach, as he had done many a time, to protect the reputation, as well as the purse of a brother professional. He (the President) wrote a letter to Mr. Hewson, the same night as that upon which he received *The Veterinary Record* containing the report of the first trial, and that would suffice to show his feeling—his strong feeling at that time, but when he received the report of the appeal his astonishment was greater than at the first report, when he saw the name of Mr. Hunting on the side of the prosecution. He had always thought Mr. Hunting a great stickler for the rights and liberties of the profession, and that instead of trying to ruin a brother professional in a very doubtful case, he would sooner have gone to his assistance and helped him out of his difficulty. He could only think that Mr. Hunting took the part he did without giving the slightest thought to the matter, and, to use his own words as against the R.S.P.C.A., "made one great mistake and appeared on the wrong side." As for the other gentleman all the way from London, he—and he thought he might say they—were not surprised at his action in the matter. He believed it was this gentleman's business or trade to travel about for the R.S.P.C.A.—and they all had to live some means or other—and as expert evidence had so many sides to it, it was easy to blow the wheel one way one day, and the other way the day following, and so keep the business going. He would read them his letter to Mr. Hewson on the appearance of the first report, and then ask them to express their opinion of the conduct of those gentlemen against Mr. Hewson. The letter was as follows:

"April 8th, 1899. Cruelty case at Carlisle. I have just read in *The Veterinary Record* the report of this case before the magistrates, and also the report of the special meeting of the members of the Border Counties Veterinary Society, and I scarcely know how to commence this letter, to express sufficiently my surprise at the proceedings and their termination, but I do hope yourself and the Border Counties Society, with the rest of the profession, will not allow what has already happened to be the termination of the case, and I as one of the "rest" enclose 10s. 6d. towards the expense of an appeal. I am quite aware of the differences of opinion that may be formed from the report of a case and the direct hearing of the evidence in the same case, so that certain allowances may be made, but in the present case the facts are so simple that it resolves itself into a professional opinion of cruelty or no cruelty. After over 40 years experience in an extensive cattle practice I say most decidedly that there was no cruelty, if the report is correct. Every cowman and veterinary surgeon who has a cattle practice well knows what very great difficulties in parturition a cow will go through with comparatively little suffering or after trouble. I have known cows commence to calve in the field, and to be found grazing about with the head and one leg of the fœtus

protruding from the vagina, dried up by the heat of the sun, and then driven half a mile or more before delivery and take no harm. As to cows with dead calves in them, they will travel several miles without showing pain or fatigue. How three M.R.C.V.S. could be found to help to strangle a brother professional over such (I say nothing more) a doubtful case of cruelty I do not know. If Mr. Elphick's statement as reported by Mr. Hewson is correct, that immediately a cow commences to pain, she would pain on incessantly until she killed herself of pure exhaustion or got rid of the fœtus, it shews that Mr. Elphick knows very little about the subject. He was perhaps thinking of the mare and not the cow, for how frequently is it necessary when you have got the calf in a position for delivery to have to give the cow some uterine stimulant for her to help delivery? Mr. Brown and Mr. Tennant, like good little boys under the R.S.P.C.A., pulled at Mr. Elphick's rope to finish their brother M.R.C.V.S. How delighted they must feel at the result. But out of evil comes good, and I hope it will in this case.—Yours faithfully,

T. FLETCHER, M.R.C.V.S."

In reply to that letter (continued the President) he received an intimation that the conviction had been appealed against, and quashed.

Mr. A. W. MASON (Leeds) expressed the opinion that the evidence for the prosecution in the Carlisle case was the most deplorable exhibition that had ever taken place. It was clear that the expert evidence was given by experts who did not treat the bovine species. The time had come in his opinion when such societies as theirs should discuss such matters as these fully and freely, and determine on some way in which they could protect themselves individually from these attacks, which seemed to come from behind their backs. A more deplorable exhibition than the expert evidence in this case he never saw, and he thought they should as a Society protest against it in a practical way. He moved that as a protest against this case, the Yorkshire Veterinary Medical Society should forward a subscription towards the costs of Mr. Hewson's appeal. He suggested £2 2s., but it was not the amount of money, but the protest that he cared for.

Mr. J. S. CARTER (Bradford), after expressing concurrence with the experiences of the President with regard to cattle practice, said in his opinion Mr. Hewson was very badly treated.

Mr. J. E. SCRIVEN (Tadcaster) said there was no cruelty in the case at all. These men came down from London and knew nothing about cattle at all, yet they gave evidence of the kind they had for the R.S.P.C.A. Professor Pritchard and Mr. Wm. Hunting were on the list of Honorary Associates of the Yorkshire Society. He moved that their names be struck off. (Hear, hear.)

Mr. J. CLARKSON (Garforth) said the rules of the Society provided that before that course was taken the members involved were to be written to and asked for an explanation. Professor Pritchard had been connected with these prosecutions before.

Mr. G. E. BOWMAN (Leeds) pointed out that this was the first case in which Mr Hunting had been concerned and deprecated the extreme step being taken of removing his name from the Society.

Mr. W. F. GREENHALGH (Leeds) moved that the Secretary should write to Professor Pritchard and Mr. Wm. Hunting and ask for their explanation of the circumstances.

Mr. F. W. SOMERS (Leeds) seconded, and the motion was agreed to unanimously.

The resolution to subscribe £2 2s. to the Hewson appeal costs was also agreed to unanimously.

LEEDS CORPORATION AND INSPECTION OF COWS AND COWSHEDS.

Mr. W. F. GREENHALGH (Leeds) referred to the proposals in the Leeds Corporation Bill in Parliament with reference to the inspection of cows. As at first proposed a scavenger could have gone into a mistal and inoculated —or tried to inoculate—with the tuberculin test, and pass an opinion on it. That had now been completely changed. The Bill was so modified that a veterinary surgeon was to accompany the Medical Officer of Health in all inoculations. So that the point claimed by the veterinary profession had been gained. Referring to the difficulties in the way of inspection for tuberculosis, Mr. Greenhalgh said he and Mr. Bowman had lately made two post-mortem examinations. One was an animal that had won two prizes at the Leeds Show, one for milk and the other for weight. She was inoculated and shewed a rise of temperature and reacted. She was killed and there was nothing in the lungs or liver or any of the organs to shew tuberculosis. It was only on minutest examination that they found traces in gland of the throat. How was it possible for anyone but a veterinary surgeon to deal with such cases?

Mr. BOWMAN reported another case in which he examined the udder minutely before slaughter and found not the slightest trace of disease. But when the cow was killed and he made a post-mortem examination, he found any amount of tubercle in the udder. It could not, however, be felt externally.

A vote of thanks having been passed to the Committee which met the Leeds Corporation on this matter, Mr. A. W. Mason, who was the Chairman of the Committee, said they might congratulate themselves upon the position at present. They had asked the Leeds Corporation that they should be the instruments to point out to the Medical Officer of Health diseased animals, and that they should be the proper persons—as indeed they were the proper persons—to make use of the tuberculin test. These provisions were in the present Bill, so they might congratulate themselves up to a certain point.

Mr. C. SECKER SMITH (Barnsley) described an interesting case, which was discussed at length, and this concluded the business of the meeting.

The PRESIDENT announced that at the next meeting Professor Macqueen would be present and read a paper.

EXTRACTS AND NOTES.

PROSECUTION UNDER THE V.S. ACT.

At the Edgware Petty Sessions, on 10th May, 1899, T. Etheridge, of Elm Terrace, Finchley Road, Childs Hill, was summoned at the instance of the Royal College of Veterinary Surgeons for an infringement of Section 17 of the Veterinary Surgeons Act, 1881. Mr. Thatcher, the College solicitor, conducted the prosecution. The defendant pleaded "not guilty." Mr. Thatcher stated that the defendant had the words "T. Etheridge's Veterinary Forge" painted upon the end of the house overlooking the Finchley Road, and cited authorities to show that this constituted an offence. Evidence was given in support of his statement. The defendant pleaded that he had acted in ignorance, and that when he received a notice from the College he had given instructions to have the words painted out, but that it had not been done. In answer to the Bench Mr. Thatcher stated that the notice in question had been given four months ago, and that there had been plenty of time to do what was necessary.

The Chairman, after consultation with the other magis-

trotes, told the defendant that they thought he had acted more in ignorance than in wilful violation of the law, and that therefore they would only fine him 10s. and the costs, but he warned him that unless the word "veterinary" was removed at once he would be severely puniched if complaint was again made.

PREVENTION OF EPIZOOTIC ABORTION IN COWS.

The Royal Agricultural Society of England has issued the following useful leaflet :—

The common cause of repeated abortion at intervals in the same herd is contagion.

The disease is caused by a germ which multiplies in the womb, between that and the membranes that surround the calf.

The premature expulsion of the calf is the result of the inflammation and irritation of the womb set up by the germs, but a cow thus affected may nevertheless carry her calf to full term.

The discharges which come away from an affected cow, and especially those that escape during and after the act of abortion, contain the germs in great numbers, and are therefore capable of spreading the disease.

The disease is probably usually spread by such discharges coming into contact with root of tail and vulva of the healthy cows, but it may be spread by means of the bull.

Whenever an outbreak occurs it ought to be treated on the lines applicable to the suppression of other contagious diseases.

The measures adopted should include (1) the prompt removal from the herd of any cow that has aborted, or that shows signs of impending abortion ; (2) destruction of the fœtus and its membranes, by fire or otherwise ; (3) frequent cleansing and disinfection of the byre or cowshed ; (4) daily sponging of the root of the tail and neighbourhood of the vulva of each cow with a disinfectant solution.

In disinfecting the byre attention should be directed mainly to the hinder part of the stalls, and the channel behind the cows. As a disinfectant a solution of sulphate of copper, chloride of lime, or carbolic acid (one in fifty parts of water) may be employed. The more freely this is used the better.

For sponging the hinder parts of the cows the following solution may be used :—

Corrosive Sublimate	2½ drachms.
Hydrochloric Acid	2½ ounces.
Water	2 gallons.

This Solution is Highly Poisonous.

A "CRUELTY" CHARGE DISMISSED.

Thomas Fesey, 65, carman, of Bartholomew's-buildings, St. Luke's, was brought before Mr. Fordham, at North London Police-court on Tuesday, May 2nd, charged with cruelty to a horse.—Police-constable 427 N said that on Monday night he was at Stamford-hill, when an officer of the Society for the Prevention of Cruelty to Animals called his attention to the animal of which prisoner had charge. Under the saddle he found a sore four inches in extent, from which blood and matter were exuding.

An officer from the Royal Society for the Prevention of Cruelty to Animals was called to corroborate, and he said the wound on the horse's back was two inches in extent. But he supposed that the policeman thought the wound was larger because of the suppuration.

Mr. Fordham now went into the yard to look at the animal, and with him also went Mr. Shaw, F.R.C.V.S. On returning to Court, Mr. Shaw said the wound was not as stated by the policeman and the inspector. There was a little hair rubbed off ; but there was no suppurating wound. There was a little moisture about the place.

Mr. Fordham, in deciding the case, said that whenever he had people before him charged with causing unnecessary suffering to animals by working them in an unfit state, he took very strong measures with them. He did his best to teach owners and drivers to be kind to the poor dumb animals—the poor slaves to human beings. He had seen this animal himself, and though he could not give evidence to himself, he had the advantage of the assistance of Mr. Shaw, who had great experience with horses. He (the Magistrate) could not help saying at once that the policeman and the inspector in the case ought to be very careful in the evidence they might give in the future. They both said the animal in question had a running, suppurating wound—the policeman saying it was four inches in extent, and that the saddle rubbing against it would cause considerable pain. But after the policeman's evidence had been given, the Society's Inspector modified it by saying it was only two inches in extent, and that there was blood and matter running from it. But what did he (the Magistrate) find ? He found that there was a little hair rubbed off under the saddle, and that there was a little moisture on the saddle as a result. A little easing of the saddle would do all that was necessary to enable the animal to work in comfort. He had no hesitation in discharging the prisoner, and in saying that he never ought to have been charged. With regard to the policeman and the inspector, he thought that both ought to be warned as to the evidence they give in future.

In a subsequent charge of cruelty to a horse, Mr. Fordham fined Joseph Persoll, 52, baker, of St. Ann's-road, South Tottenham, £5, for cruelty to a horse subsequently killed.

A BOMBAY VETERINARY GRADUATE.

Notice.

The Public are informed that
Dr. D. S. Shroff, L.R.C.P., L.R.C.S. (Edin.)
AND
Specialist, Diseases of the Eye.
Should not be mistaken for his younger brother,
Mr. B. S. Shroff, G.B.V.C.
Veterinary Surgeon
OF 45, FREE SCHOOL STREET.
Eye Infirmary
will shortly be opened at
43/1, DHURRUMTOLLA STREET.

'98

Looks odd, doesn't it?

Have I written it many times? I have not ; because I have only just decided to depart from the beaten track and make the pleasing announcement that

THE CALCUTTA DOG INFIRMARY
AT NO. 43 FREE SCHOOL STREET,
IS NOW OPEN.

Just in honour of the occasion I am going to make this figure stand out for one week. Next week I shall tell you all you want to know about my business and myself but for the present I merely desire to impress on you the fact that

A CANINE INFIRMARY,
Presided over by a Specialist.

which has been a long-felt want in Calcutta, is now a *fait accompli.*

CHARGES VERY MODERATE.

All calls personally attended to with promptitude by
B. S. SHROFF, G. B. V. C.,
Proprietor, The Calcutta Dog Infirmary.

THE
EQUINE SURGERY AND CALCUTTA DOG INFIRMARY,
43, FREE SCHOOL STREET.

DR. SHROFF, LATE LECTURER OF Anatomy, Physiology, Hygiene, and "Exterior of the Horse" (Soundness, &c., of the Horse) in the Bengal Vety. Instn.; and Vety. Surgeon to Messrs. Jos. Lauter & Co., for some time Vety. Officer deputed by Govt. to investigate and treat Cattle Disease, Kolaba District, Bombay; Supdt. of the Patho-Bacteriological Laboratory in the Bombay Vety. College; Vety Surgeon to the Rajpootana Frontier Troops; Vety. Officer in charge Nasik Vety. Infirmary, etc., etc., begs to announce to the Calcutta public that he has opened a Vety. Infirmary at 43, Free School Street, where horses are treated under his immediate supervision. Dr. Shroff also begs to announce that he has made the diseases of dogs his special study, and is very successful in the treatment of the canine race, thus supplying a long-felt want, *viz.*, a "CANINE SURGERY."

B. S. SHROFF, G.B.V.C., PROPRIETOR.
The Daily News (Calcutta).

THE CARLISLE APPEAL CASE.

	£	s.	d.
Amount brought forward	23	0	6
A. Chivers		10	0
R. W. Glaister		10	0
Harold Sessions		10	6
The Yorkshire Veterinary Medical Society	2	2	0
	£26	13	0

It is to be hoped that other veterinary medical societies will follow the example of the Yorkshire Society, and show their sympathy with the cause by sending a generous donation.

HENRY THOMPSON, *Hon. Sec. & Treas.*

Note.—Please substitute Mr. Henry George Simpson, for Sir Henry Simpson, and oblige, H. T.

OBITUARY.

SAMUEL LAWTON BUCKLEY, M.R.C.V.S., Blackburn.
Graduated, Lond., April, 1863.

By the death of Mr. Buckley, which occurred at his residence, Mill Lane, on Monday morning, May 1st, Blackburn has lost one of its best known townsmen; Freemasonry, an active member of the craft; and sport, one of its chief supporters. For more than twelve months the deceased gentleman had been in very indifferent health, and his demise did not come as a surprise to his very wide circle of acquaintances. He was 58 years of age, but was never married. Born at Oldham on the 12th of November, 1840, he went, when a young man, to Rochdale, where his uncle, Dr. Lawton, lived, and whilst there qualified as a veterinary surgeon. In 1863 he was awarded the Coleman medal, and very soon after he had passed his examinations he came to Blackburn and established a practice of his own, in which he was eminently successful. For upwards of thirty years he held the position of inspector under the Contagious Diseases (Animals) Act, for the boroughs of Blackburn and Darwen. He was hon. veterinary surgeon and inspector for the Great Harwood and Whalley Agricultural Societies, and last year's show at Blackburn of the Royal Lancashire Agricultural Society. When the local Canine Association was formed, ten years ago, he was chosen hon. veterinary surgeon, holding the position up to the time of his death. At a special meeting of the Association on Thursday night a vote of condolence with the executors of the deceased was passed. At one time, he was the owner of the Pendle kennels. His most famous greyhound was Bess Speech, which won the Lytham Cup. Mr. Buckley bred many of his greyhounds, two of these were Bhawlpore and Bhurtpore, one of which won the South Lancashire and the other the Southport stakes. Mr. Buckley was, besides, a great curler, and one of the oldest and hardest working members of the Caledonian Club. In 1874 he was appointed secretary, and filled that office for nine years. After his retirement he was presented with an illuminated address and a pair of silver-mounted curling stones. When he resigned in 1886, he was elected a vice-president, and the following year the members showed their appreciation of his services by choosing him president, a position he held up to last year, when the state of his health caused him to give up office. He was most regular in his attendance at all meetings; and at the last annual dinner of the Club it was remarked that that was the first occasion Mr. Buckley had been absent for many years. The committee of the club held a special meeting on Tuesday night, and passed a resolution, which was entered on the minutes, recording their sense of the loss the club had sustained by the death of their late president. Mr. Buckley was also a Freemason, being a P.M. of the Lodge of Fidelity, 269, and P.P.G. Superintendent of Works, E. Lancashire. He was elected W.M. of his own lodge in 1880. Though often pressed to do so, the deceased gentleman could never be persuaded to come forward as a candidate for municipal honours. A conservative in politics, he was at one time a vice-president of the Central Conservative Club, on which building, as well as the Junior Conservative Club and the Town Hall, the flag was put at half-mast as soon as the news of his death became known. —*The Blackburn Times.*

ARMY VETERINARY DEPARTMENT.

The annual dinner of the Army Veterinary Department will be held in the Whitehall Rooms, Hôtel Metropole, London, at 8 p.m. on Tuesday, May 30th, 1899. The Director-General in the chair. Retired officers of the Department who have not received a notice and wish to be present, are requested to communicate with Vet.-Lieut.-Colonel G. Durrant, 66, Victoria Street, Westminster.

Veterinary-Colonel H. Thompson, Principal Veterinary Officer in India, arrived in this country on the 6th inst. on leave of absence.

The undermentioned officers also arrived from India on leave of absence:—Vet.-Capt. E. H. Hazelton, Vet.-Lieuts. G. M. Williams and A. E. Clark.

CORRESPONDENCE.

ARMY VETERINARY TITLES.

Sir,

In reading the report of the last Council meeting, I was astonished to see that in discussing Mr. Simpson's motion it was suggested by two members that the reason why the officers A.V.D. are desirous for the abolition of the prefix to their titles is because they are ashamed of the term "veterinary." Mr. Cope was particularly strong on this point and actually accused us of having

"disgust and contempt" for the prefix. As mis-statements of this nature are likely to create a wrong impression, permit me to say that veterinary officers in the Army have no such feeling, but, on the contrary are, and always have been, proud of their profession and anxious to uphold its honour and reputation to the best of their ability. They have no desire to sail under "false colours," or to be mistaken for anything but what they are, and had not military titles pure and simple been conferred upon other non-combatant departments they would have been perfectly content with their present position. Sir F. FitzWygram says, in referring to the proposal to abolish the prefix, "the object of it undoubtedly is to snuff out a title which is not so good in the eyes of the world as a military title." Veterinary officers will, I think, quite agree with this remark. The compound title is not so good, and for this reason we desire its alteration. We decline to see that our position, either socially or officially, renders us unfit to be placed upon the same footing, as regards military titles, with other Army services. Medical officers objected to the prefix for this very reason, and it was removed, the consequence is that their position as a military department is vastly improved, and what is more important many of the best graduates of the schools are more attracted to the Service.

The A.V.D. is the only branch of the Army with compound titles, and it is this invidious distinction which is causing such a deep-seated feeling of discontent amongst our officers. They feel that the refusal to place them on an equality, as regards rank, with the doctor, paymaster, schoolmaster, etc. constitutes a slur on their department and an insult to their profession.

This feeling is not confined to the officers of the A.V.D. for the editors of the service and other newspapers have written strongly in favour of their claim for justice, while combatant officers have already given their powerful support in the press and elsewhere. A "Cavalry Colonel's" letter in a recent issue of *The Army and Navy Gazette*, and copied in *The Record* is a significant sample of the latter.

I hope the above remarks have made the true object of our claim clear to the members of our profession, and trust that if Mr. Simpson can be induced to bring forward his resolution again at the next council meeting, it will receive that support from the members which, as a cry for justice, it deserves.

I feel convinced that if our case could be brought fairly in all its bearings *directly* to the notice of the Secretary of State he would be pleased to reconsider his decision, especially, as I believe we have the support of the military authorities.—Yours truly,

A. V. D.

RAISING THE PROFESSION.

Sir,

At present a learned professor is carrying out great experiments in various parts of the country, on behalf of certain Boards, Associations, etc. The value attached to those experiments is a doubtful question.

At a certain farm where the Professor was letting loose his knowledge and, where, afterwards he was hospitably entertained by the farmer, he (the leading light) laid great stress on the fact that our profession required "raising." As to whether the Professor meant socially or pecuniarily I am unable to say, but to my mind, what is wanted is a little more gold, bearing in mind that within our ranks there are any amount of gentlemanly well-born men, good and true, who have spent their lives and their money in studying the profession with, in many cases, very little appreciation. As to the social side of the question, I don't see anything to grumble at, as a veterinary surgeon who leads the life he ought to lead has no difficulty in moving in a circle quite good enough. There is often a cry about the medical profession. The medical profession can look after itself. Let the veterinary do the same. Do what is right and respect is bound to follow, and surely that is all we want.

Adverting to the pecuniary side of the question, I will now endeavour to show how the learned professor, above alluded to, and who groans for the raising of the veterinary surgeon, helps the profession. This gentleman, amongst his many public appointments, is connected with the County Council, and it has been part of his duties to lecture on veterinary matters to agricultural students. The farmer mentioned above had a son who studied at one of the Agricultural Colleges and with great success. Amongst other lectures he listened and took voluminous notes from veterinary professor who expounded his knowledge of years collecting, with the result that he (the agricultural student) being in the first place practical amongst live stock, gained such a knowledge that in most cases he is quite capable to treat his own animals, and thus a veterinary attendant is not much required. And this, mark you, is raising the profession according to the learned professor. In all conscience is this the way to raise it? To deprive members of our college of their birthright.

In the same breath almost the man of learning speaks about raising the profession, whilst at the same time he is pulling it to shreds. Consistency is recognised by its absence.

To properly embellish this story a case in point may not be out of place. A certain test was being carried out at this farm and I happened casually to make a friendly visit. Passing along the cowshed the farmer's son pointed to a cow that had had milk fever. I observed to the professor that it might have been a case of parturient fever. The professor acquiesced, just fancy! The farmer's son made answer and said that he compared the case with the professor's notes, which he had taken at college, and the cow presented symptoms identical. I meditated, the professor looked a little uneasy, and once again this is how to "raise the profession." What with recipes, etc., in agricultural papers, and lecturing at agricultural colleges it seems a problem how the country veterinary surgeon is to exist who is dependant upon farmers. I am truly thankful that so far as I am personally concerned my lines have fallen in pleasant places where I do not much depend on farmers, and this shows that in writing this letter I do so merely in the interests of the profession, which should be at the heart of every member.

It is impossible that the professor in question can care two pins for our members, as after lecturing to veterinary students at a veterinary college and sending them out into the world to make a living he comes and, so to speak, takes the bread out of their mouths. A member not long ago said it is time our Council did something. Professional etiquette, social status, bacteriological research, etc., may be all very well, but bread is essential.

In conclusion, I should like to point out that in the particular case alluded to I do not feel at all aggrieved, as at a critical time in my career this farmer and his family showed me such kindness and hospitality as shall never be erased from my memory, and for that reason I rejoice at their successful treatment of their live stock quite as much as if the animals belonged to myself.

I solely write in the interests of our profession at large as I am quite certain the above is not an isolated case.—I am, yours, etc.,

A Plain V.S.

Communications, Books, and Papers received:—Messrs. W. F. Barrett, G. Green, J. Webb, B. Eggleton, C. Dayus, J. M. Tate, G. Thatcher. A.V.D.

Journal of Comp. Med. and Vety. Archives (Philadelphia); *Annual Report Chief Sanitary Inspector* (Edinburgh).